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ABSTRACT

This manual is intended to assist assessment and teaching personnel in assessing and developing instructional plans for special needs students from early school to independent living and employment. It contains 10 chapters. The following topics are discussed in the first nine chapters: the purpose of career assessment; ethical issues (qualifications, confidentiality, certification); organization of the assessment process (functions, levels, and settings of assessment; procedures for planning the assessment process; personnel responsibilities); selection of assessment instruments (selection guidelines, information collection methods, instruments to assess the whole person); assessment of special populations (mentally retarded, learning disabled, speech- and language-impaired, behaviorally disordered, visually or hearing impaired, physically or health impaired, multiply handicapped, and disadvantaged students); report writing; interpretation of assessment results (interpretation for students, teachers, counselors, resource personnel, parents, community members); use of comprehensive assessment results (program planning, counseling and instructional strategies); and vocational assessment (levels, processes, types of instruments used). The 10th chapter reviews 212 different assessment instruments in the following categories: achievement, adaptive behavior, aptitude, career development, intelligence, interest, learning styles, and work assessment. Each assessment review contains the following: target population, norm groups, purpose, title of subcomponents, types of scores, scoring information, validity, reliability, copyright, publisher, comments, and source of information. A bibliography and list of publishers' addresses are included. (MN)

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CAREER ASSESSMENT INSTRUMENT RESOURCE GUIDE

A Manual For Assessing Vocational Special Needs Students

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PREFACE

This career assessment manual is a response to the needs of special and vocational educators in the State of Missouri. Vocational special needs personnel have indicated a need for materials related to assessing special needs students and for placing them in appropriate educational and vocational programs. Legislation such as Public Law 94-142, Education for All Handicapped Children's Act and Public Law 98-524, Carl D. Perkins Education Act have increased this need. In 1981, Ms. Ellen Arkin-Brown and Dr. Carl Cameron responded with *A Guide to Interpreting and Implementing Individual Assessment Information for Vocational Special Needs Students*. This manual builds upon the strengths of *A Guide* but is expanded both in scope and in the number of assessment instruments reviewed. It is not intended to take the place of formal coursework in measurement and evaluation. Rather, it complements training by focusing on issues central to career assessment of handicapped students. Counselors, special education teachers, vocational instructors, vocational resource educators, vocational assessment specialists, and other specialists in the schools should find this document helpful as they assist students, parents, and teachers to work effectively and cooperatively from elementary school through the transition from school to work or appropriate post-secondary school placements.

The writing staff expresses sincere appreciation to the following three groups: 1) the external reviewers, 2) the hard working advisory committee, and 3) our dedicated secretary, Ms. Barbara Mountain.

This manual is intended as a resource for guidance. It is not to be considered as regulatory.

CHAPTER 1. CAREER ASSESSMENT

Career assessment is based on the idea that people have assessment needs throughout their life because their careers change. The elementary school child has two primary careers: student and family member. As the child matures so do the number of careers or roles played. Sitlington, Brolin, Clark & Vacanti (1985), define career assessment as a developmental process that begins in the elementary school and continues through adulthood. Career guidance, and hence, assessment, needs to focus on all roles the student will perform including the role of student, family member, citizen, worker, employer and participant in productive leisure activities that are of benefit to self and others.

When learning problems surface in school, assessment can help the staff identify the components of the problems and plan instruction based on the identified needs. Career education should also help the student live with family and peers, and adapt to post school activity. With appropriate special education services, larger numbers of special education students can meet the competitive demands of society. Elementary teachers, however, must initiate longterm planning for the career education of special needs students. All teachers need to teach students to plan, seek answers to questions, decision-making skills, and to compare accomplishments with requirements. Students who have these skills will find planning for their secondary program, daily living and job seeking much easier than those without these skills.

Educational assessment is well established in American schools but has become more important for special education students since 1975 with the passage of Public Law 94-142, the Education of All Handicapped Children Act, and Public Law 98-524, The Carl D. Perkins Vocational Education Act. Public Law 94-142 specifies the responsibility of local educational agencies (LEAs) to determine through assessment procedures whether a child is handicapped and what services are needed to meet the needs created by the handicapping condition. These assessment procedures may not be ones administered to or used with all students (*Federal Register*, Tuesday, August 23, 1977). The Carl D. Perkins Vocational Education Act requires LEAs who use its funding to assess the interest, abilities and special needs of all handicapped and disadvantaged students enrolled in vocational education programs as a means of facilitating successful completion of the vocational program (*Federal Register*, Friday, August 16, 1985). With these two pieces of legislation, vocational programming for secondary and postsecondary students is a possibility.

Purpose of Manual

This manual will assist assessment and teaching personnel in facilitating individual achievement through the assessment and planning processes from early school to independent living and employment.

Using This Manual

This manual was designed to be used by special needs personnel in Missouri schools. It is to be used as a supplement to professional training and not to be used in lieu of appropriate training. All personnel working with student assessment results should take at least one course in educational measurement as part of their professional training. Detailed requirements for professional groups are listed in Chapter 2, Ethical Issues. A manual such as this should facilitate communication among the staff who assist in the assessment of special needs students. Each staff member needs to know what is involved in each phase of educational assessment.

The first part of the manual is a summary of some of the major topics of assessment as they apply to special needs students. Several chapters deal with topics that apply equally to all assessment specialists involved in assessing special needs students. Topics in this area include Ethical Issues, Organization of the Assessment Process, Selecting Assessment Instruments, Writing Reports, Interpreting Results, Using Results, and Vocational Assessment. These chapters serve as a quick reference for persons needing to review the basic principles of each topic. Chapter 2, Ethical Issues, briefly reviews the qualifications of examiners for various specialized areas of assessment and the basic requirements and principles involved in confidentiality. Chapter 3, Organization of the Assessment Process, serves as the foundation for the remaining chapters. Topics covered in this chapter are the functions of assessment, levels of assessment, components of assessment, planning the assessment process, location of assessment, and personnel. A special section is devoted to vocational assessment.

Chapter 4 provides basic guidelines for selecting assessment instruments. Various methods of collecting information are described, especially as they apply to special populations. Chapter 5 provides guidance when dealing with specific populations. Chapter 6 provides guidelines and examples for writing reports such as the diagnostic summary in special education programs and the vocational assessment report. The information in reports must be interpreted (Chapter 7) to students, counselors, teachers and resource personnel so the data will be used. The resulting data are used (Chapter 8) for program planning, instruction, and counseling. Chapter 9 provides an overview of vocational assessment and provides structure for reviewing the instruments of various categories.

The categories of intelligence, aptitude, achievement, adaptive behavior and its observation and recording, learning styles, interest, career development, and work assessment are described followed by a review of individual instruments. Instruments were selected on the basis of 1) instruments reported in use by advisory committee members, 2) new instruments, 3) the availability of one or more review sources, and 4) utility with special needs students as each of the instruments are purported to be appropriate for some handicapped or disadvantaged students. However, the quality of assessment instruments varies remarkably. The reader is, therefore, cautioned to critique each instrument carefully before deciding to use it with local students.

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CHAPTER 2. ETHICAL ISSUES

Educators are responsible for providing students with the skills, experiences, and opportunities that will prepare them to be productive citizens in an ever-changing, complex society. Sound educational programs and processes must be used to provide students with the ability to make adequate educational and career decisions. These statements apply to all students.

Federal legislation has stimulated the interest of educators in legal and ethical issues. Specific pieces of legislation include "The Education of All Handicapped Children Act" (Public Law 94-142); the Family Rights and Privacy Act, Educational Amendment of the Elementary and Secondary Education Act of 1965 (1974); the Hatch Amendment of the General Education Act, (Public Law 95-561); Section 504 of the Rehabilitation Act of 1973, and the Carl D. Perkins Vocational Education Act (Public Law 98-524). These laws carry with them specific responsibilities relative to the process of educational opportunities for children.

Special education personnel are key people in most assessment programs in Missouri schools. In addition, the school counselor plays an active role in the assessment process. School psychologists/psychometrists, physical and occupational therapists, and vocational assessment specialists may be involved with assessment. Regardless of the personnel involved, a team approach to assessment most effectively utilizes personnel in their areas of expertise and enhances the meeting of student needs.

Qualifications

Personnel involved with assessment in schools are certified by the Missouri Department of Elementary and Secondary Education in their areas of expertise. Rehabilitation specialists should be certified by their respective national certifying body. School-based vocational evaluators are certified through the Missouri Department of Elementary and Secondary Education, Vocational Special Needs and Guidance Division. A degree in vocational evaluation or a master's degree in counseling is required for full certification. Temporary certification is possible when applicants meet most of the requirements for certification. The Commission on Certification of Work Adjustment and Vocational Evaluation Specialists (CCWAVES), formed in 1981, certifies professional vocational evaluation specialists regardless of work setting. To be certified by CCWAVES, the applicant must meet all requirements regarding education and employment experience in 7 of 11 identified areas through work experience, education or training. The standards for certification and the performance areas are listed in the appendix of this chapter. Individuals who apply for professional certification must take an applied certification examination in addition to meeting education or training and experience requirements. As of December 31, 1986, a passing score must also be met for certification. School-based vocational evaluators in Missouri are not required to be certified by CCWAVES unless the school contracts with the Division of Vocational Rehabilitation to complete assessments for that division.

Public Law 94-142 defines and interprets assessment as "procedures used. . .to determine whether a child is handicapped and the nature and related services that the child needs. The term means procedures used and does not include basic tests administered to or procedures used with all children in a school, grade, or class" (*Federal Register*, Tuesday, August 23, 1977). All testing materials used must be selected and administered so that they do not racially or culturally discriminate against the child.

The following minimum guidelines regarding assessment procedures have been provided in P. L. 94-142. Procedures:

1. Must be provided and administered in the child's native language, if feasible, or any other method of communication.

2. Must be valid for the specific purpose for which they are used.

3. Must be administered by trained personnel and as described by the procedure.

4. Must be designed to assess specific areas of educational need and not just general intelligence.

5. Must accurately reflect the child's aptitude and achievement level and not reflect the child's impairment.

6. Be used jointly. No single procedure is used for determining educational placement.

7. Must be administered by a multidisciplinary team.

8. Must assess the child in all areas related to the disability. This should include, when appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities.

The Missouri Department of Elementary and Secondary Education, Division of Special Education, suggests a five step method for developing an evaluation plan. Step 4 pertains to administration of the tests:

> Determine persons responsible for administering selected procedures. Assignment for data collection responsibilities is made on the basis of certification, training, areas of expertise, and prior experience rather than on professional titles. For accurate assessment to occur, the multidisciplinary team should include:
>
> a. At least one person qualified to conduct individual diagnostic examinations of students such as a school psychologist, school psychological examiner, school counselor, or a speech/language specialist.
>
> b. The student's regular classroom teacher, or if the student does not have a regular teacher, a regular classroom teacher qualified to teach a student of his/her age, and other specialists as needed.
>
> c. At least one teacher or other specialist with knowledge in the area of the suspected disability (Missouri, 1983, pp. 32, 34).

Selected assessment instruments, such as individual intelligence tests must be administered by trained personnel such as school psychological examiners or counselors certified by the Department of Elementary and Secondary Education. Requirements for the initial School Psychological Examiner Certificate, which become effective September 1, 1986, are listed in the appendix of this chapter. The initial Secondary School Counselor Certificate requirements are also listed in the appendix of this chapter. These requirements become effective September 1, 1988. For more information regarding certification requirements, contact the: Department of Elementary and Secondary Education, Teacher Certification, P. O. Box 480, Jefferson City, MO 65102, Telephone (314) 751-3486.

The American Association for Counseling and Development (AACD) Ethical Standards addresses assessment and provides ethical considerations for school personnel. The counselor and the assessment team have responsibilities to the parents/guardians if the child is under 18. The following are excerpts from the Standards that are appropriate for consideration.

AACD Ethical Standards
Section C: Measurement and Evaluation

The primary purpose of educational and psychological testing is to provide descriptive measures that are objective and interpretable in either comparative or absolute terms. The member must recognize the need to interpret the statements that follow as applying to the whole range of appraisal techniques including test and nontest data. Test results constitute only one of a variety of pertinent sources of information for personnel, guidance and counseling decisions.

C.1. The member must provide specific orientation or information to the examinee(s) prior to and following the test administration so that the results of testing may be placed in proper perspective with other relevant factors.

C.3. When making any statements to the public about tests and testing, the member must give accurate information and avoid false claims or misconceptions. Special efforts are often required to avoid unwarranted connotations of such terms as IQ and grade equivalent scores.

C.4. Different tests demand different levels of competence for administration, scoring, and interpretation. Members must recognize the limits of their competence and perform only those functions for which they are prepared.

C.6. The meaningfulness of test results used in personnel, guidance, and counseling functions generally depends on the examinee's unfamiliarity with the specific items on the test. Any prior coaching or dissemination of the test materials can invalidate test results. Therefore, test security is one of the professional obligations of the member. Conditions that produce most favorable test results must be made known to the examinee.

C.7. The purpose of testing and the explicit use of the results must be made known to the examinee before testing.

C.8. The examinee's welfare and explicit prior understanding must be the criteria for determining the recipients of the test results. The member must see that specific interpretation accompanies any release of individual or group test data. The interpretation of test data must be related to the examinee's particular concerns.

C.9. The member must be cautious when interpreting the results of research instruments possessing insufficient technical data. The specific purposes for the use of such instruments must be stated explicitly to examinees.

C.10. The member must proceed with caution when attempting to evaluate and interpret the performance of minority group members or other persons who are not represented in the norm group on which the instrument was standardized.

C.11. The member must guard against the appropriation, reproduction or modifications of published tests or parts thereof without acknowledgement and permission from the previous publisher.

Other sets of ethical standards also apply to assessment such as those of the American Psychological Association and the Vocational Evaluation and Work Adjustment Association. Much similarity exists among all of the standards. Personnel are encouraged to identify the standards of their field and use them.

The team approach to assessment provides a systematic means of coordinating the expertise of various school personnel and outside consultants. The focus of the team approach is helping students in need of special programming. The major task of the team is to gather, analyze, and synthesize the data obtained in order to meet the needs of the students.

Confidentiality

As a team begins the assessment of a student, it is imperative to obtain parental/guardian permission. Following assessment, parents/guardians have a right to see the results and have the results interpreted to them. When appropriate, the student should be involved in this discussion. The Family Rights and Privacy Act of 1974, (the Buckley Amendment) addresses confidentiality of school records and is a law with which special needs personnel should be familiar. Further, the law addresses release of school records. This act and the regulations to implement it apply to any agency or institution which either receives federal funds directly from the Office of Education, or which has students who receive funds from the Office of Education through the College Work Study Program, Supplemental Opportunity Grants program, National Direct Student Loan program, Guaranteed Student Loan program, or Basic Educational Opportunity Grant program funds.

The Family Rights and Privacy Act allows for the following student/parental rights:

1. The right to inspect and review education records by parents within a reasonable period of time, but in no case more than 45 days after the request has been made.

2. The right to reasonable requests for explanations and interpretations of the records and the right to obtain copies of the records from the educational agency or institution.

3. Postsecondary institutions must exercise limitations on the right to inspect and/or review educational records. Whenever a student has attained 18 years of age, or is attending an institution of postsecondary education, the rights and privileges previously belonging to the parents are transferred to the 18 year old.

The Educational Amendments of the Elementary and Secondary Education Act of 1965 (1974) also addresses parental rights.

1. No federal funds will be made available to schools that deny parents "the right to inspect and review any and all official records, files and data directly related to their children" (p. 3).

2. Such data specifically includes "scores on standardized intelligence, aptitude, and psychological tests, interest inventory results, [and] teacher or counselor ratings and observations" (p. 3).

Consequently, it is a legal right of parents to obtain a child's scores not only on aptitude and achievement tests but also on personality inventories, and the data a teacher or counselor has obtained from observations or ratings.

It is a requirement in LEA compliance plans for schools to have a written policy on confidentiality and school records prepared by those who will be implementing the policy. The policy should be compatible with national and state laws, ethical standards of professional organizations, and school district guidelines.

Confidentiality is a factor which must be considered should records or test reports be stored using microcomputers. Access to records stored must be restricted to appropriate educational personnel. As a result, it is necessary to establish security procedures regarding the confidential information stored. Since such information is confidential, the consent of the parents/guardians must be obtained prior to release if the child is under 18. With the increased storage capability of com-

puters, it is important that only the data necessary for the services to be provided be stored. It is imperative that school personnel consider the ethical and legal issues and implications of storing student information using computers. Computers add new dimensions in terms of storage capabilities, but present issues which must be dealt with before problems arise.

It is important for all educators to examine the ethical issues regarding school records and also be knowledgeable of the state and local legislation related to handicapped students. It is recognized that the role definitions and work settings of assessment personnel include a wide variety of academic disciplines, levels of academic preparation, and agency services. This diversity poses challenging complexities in efforts to set standards for performance, desired requisite preparation and practice, and support of social, legal, and ethical controls.

The General Education Provisions were amended in 1978 regarding the protection of pupil rights. These amendments are generally referred to as the Hatch Act. The law states all instructional material, including teachers' manuals, films, tapes, or other supplementary instructional material that will be used in connection with any research or experimentation program or project shall be available for inspection by the parents or guardians of the children engaged in the program or project. For the purpose of this section of the law, "research or experimentation program or project" means any program or project in any applicable program designed to explore or develop new or unproven teaching methods or techniques. It also states that no student shall be required, as part of any applicable program, to submit to psychiatric or psychological examination, testing, or treatment in which the primary purpose is to reveal information concerning:

1. Political affiliations;

2. Mental and psychological problems potentially embarrassing to the student or his family;

3. Sex behavior and attitudes;

4. Illegal, antisocial, self-incriminating and demeaning behavior;

5. Critical appraisals of other individuals with whom respondents have close family relationships;

6. Legally recognized privileged and analogous relationships, such as those of lawyers, physicians, and ministers; or

7. Income (Other than that required by law to determine eligibility for participation in a program or for receiving financial assistance under such program), without prior consent of the student (if the student is an adult or emancipated minor), or in the case of unemancipated minor, without the prior written consent of the parent.

The amendment, however, applies only to programs that get direct federal financing. Should a conflict arise, the complaint must show evidence of an initial attempt at resolution with local and state officials and provide the name of local and state officials contacted, as well as significant dates in the attempted resolution process.

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Appendix 1: State Department of Education
SCHOOL PSYCHOLOGICAL EXAMINER'S CERTIFICATE

Effective September 1, 1988

I. *Initial Certificate*

The school psychological examiner's certificate, valid for a period of five years from the effective date on the certificate, will be issued to those persons meeting the following requirements:

A. Completion of master's degree from a college or university meeting approval of the Missouri Department of Elementary and Secondary Education in

1. Psychology
2. Educational Psychology
3. Guidance and Counseling or
4. Education

B. A valid Missouri teaching certificate.

C. Recommendation for certification from the designated official of a college or university approved to train elementary and secondary counselors by the Missouri Department of Elementary and Secondary Education.

D. A minimum of two years teaching experience approved by the Missouri Department of Elementary and Secondary Education.

E. Completion of a course in Psychology and Education of the Exceptional Child for two or more semester hours.

F. A minimum of 24 semester hours of professional preparation at the graduate level with competencies demonstrated in all areas listed to the satisfaction of a college or university meeting approval of the Missouri Department of Elementary and Secondary Education.

Course Areas

* Psychological development: child. adolescent, or developmental psychology
* Psychology of education
* Statistical methods
* Mental hygiene or psychology of personality
* Psychological tests and measures for the analysis of student performance
* Individual intelligence tests
* Individual diagnostic assessment (other than the Wechsler and Binet)
* Supervised practicum in an educational or clinical setting with children and youth of school age in the administration and interpretation of individual intelligence tests, formal and informal diagnostic procedures and the application of the information to develop instructional strategies.

* Must be separate graduate course of at least three semester hours.

Competencies

Methods and/or techniques of interpretation of tests

Analysis and diagnosis of learning problems including special consideration of low incidence populations

Interpretation of formal and informal diagnostic assessments and their application for prescriptive instruction

Utilization of knowledge of classroom environment, psychological principles, and test data to plan for management of special needs children

Diagnostic interviewing techniques

Process of staffing with other professionals to develop instructional strategies

Administration and interpretation of the Wechsler and Binet

SECONDARY COUNSELOR'S CERTIFICATE

Grades 7-12

Effective September 1, 1988

I. *Initial Certificate*

A secondary counselor's professional certificate, valid for a period of five years from the effective date on the certificate, will be issued to those persons meeting the following requirements:

A. A valid Missouri teaching certificate (elementary and secondary) as required to teach in the public schools of Missouri.

B. A minimum of two years approved teaching experience.

C. Completion of a course in Psychology and Education of the Exceptional Child for two or more semester hours.

D. Completion of a master's degree with a major emphasis in guidance and counseling from a college or university meeting approval of the Missouri Department of Elementary and Secondary Education.

E. One year of accumulated paid employment (*other than teaching or counseling*).

F. Recommendation for certification from the designated official of a college or university approved to train secondary school counselors by the Missouri Department of Elementary and Secondary Education based upon the completion of a planned program of at least 24 semester hours of approved graduate credit in courses in guidance and counseling with at least 12 semester hours focused upon guidance and counseling in the secondary schools.

1. Successfully completed one course in each of the following areas:

   * Orientation to the Personal and Professional Development in Counseling
   * Foundations of Secondary and Elementary School Guidance
   * Theories and Techniques of Secondary and Elementary School Counseling
   * Theories and Techniques of Group Counseling
   * Practicum in Counseling
     * Must be separate graduate course of at least three semester hours.

2. Supervised practice in a Secondary School Guidance Program for at least three semester hours.

3. Knowledge and/or competency in each of the following areas:
   Theories of human development
   Theories of learning
   Theories of personality
   Theories of career development
   Assessment materials and techniques
   Administration and interpretation of individual intelligence tests
   Utilization of information services and community resources
   Research methods and statistics
   Consulting with parents and staff
   Develoment of positive mental health in the school environment
   Process of staffing with other professionals to develop instructional strategies
   Program development including needs assessment, implementation, evaluation
   Time management with attention to priority setting for goals and objectives
   Professional organizations and ethical standards

Appendix 2: CCWAVES

STANDARDS FOR CERTIFICATION AS A VOCATIONAL EVALUATION SPECIALIST

To be considered eligible for certification the applicant must meet all requirements regarding education and employment experience in one of the categories listed below. Educational and employment experience requirements must be fully satisfied at the time the application is submitted.

CATEGORY A

Formal Education:	Master's or Doctor's degree specializing in Vocational Evaluation
Granted by:	An education program specializing in Vocational Evaluation
Internship:	Internship in Vocational Evaluation

CATEGORY B

Formal Education:	Master's or Doctor's degree in a related human service field, e.g., work adjustment, rehabilitation counseling, counseling and guidance, psychology, social work, education, educational psychology, occupational therapy, nursing, vocational education, special education
Granted by:	An education program specializing in one of the related areas
Work experience:	12 months of paid work experience as a Vocational Evaluation Specialist

CATEGORY C

Formal Education:	Bachelor's degree specializing in Vocational Evaluation
Granted by:	An education program specializing in Vocational Evaluation
Work experience:	12 months of paid work experience as a Vocational Evaluation Specialist

CATEGORY D

Formal education:	Bachelor's degree in related human services field, e.g., rehabilitation, psychology, special education, occupational therapy
Granted by:	An education program specializing in one of the related areas
Work experience:	24 months of paid work experience as a Vocational Evaluation Specialist

Essential Performance Areas For Vocational Evaluation Specialists

The Commission has identified performance areas essential for an individual to be certified as a vocational evaluation specialist. The list is not considered all-encompassing in terms of either knowledge or skill needed by professionals to provide services; however, it reflects the areas which are considered essential.

To be certified the individual must be able to meet 7 of the 11 areas (listed below) through work experience and/or education or training.

1. Job analysis
2. Functional limitations of disability
3. Occupational information
4. Work samples
5. Psychometric testing
6. Individualized vocational evaluation planning
7. Situational assessment
8. Learning style
9. Report development
10. Functional living
11. Interviewing

Fees

The operation of the Commission on Certification of Work Adjustment and Vocational Evaluation Specialists is funded primarily by fees from those seeking certification. Therefore, no action will be taken on any application unless accompanied by the appropriate fee. The fee for certification is $125.00 per specialty, $75.00 of which is refundable in the event an applicant is ineligible for certification, or decides to withdraw after application has been made.

For further information contact CCWAVES, 1156 Shure Drive, Suite 350, Arlington Heights, IL 60004.

CHAPTER 3. ORGANIZATION OF THE ASSESSMENT PROCESS

Assessment provides answers to various questions that staff members have regarding their students. These questions involve identification of learning problems, program needs and instructional and counseling strategies. Because of these broad needs, a multidisciplinary assessment team, including the classroom teacher, is needed to complete the assessment process. Also, assessment is of three types: screening, comprehensive, and prescriptive. Each of these three types will be delineated for various student age groups. Appropriate assessment is needed in each phase of student development to determine mastery of the skills taught and readiness to take the next step successfully. Administrators need to be concerned with the following components when planning or evaluating any assessment process.

Functions of Assessment

The first step in organizing the assessment process is to determine the functions to be served by the program. Within special education these functions are structured as 1) screening, 2) diagnosis, 3) placement, 4) monitoring, and 5) review or re-evaluation. Through this process the student suspected of having a learning handicap is screened to determine if further assessment is needed. Further assessment is completed when indicated, and the results are used for program placement. Monitoring of progress and specific times established for formal review and re-evaluation completes the assessment cycle. The Missouri Division of Special Education has spelled out the steps involved in these functions. Figure 3.1 shows the details and cites the source documents. Screening and diagnosis are discussed in this chapter. Placement, monitoring and review/re-evaluation are discussed in chapter 8. The functions served by vocational assessment are basically the same in that the vocational area is a component of the total special education assessment process. Results of the vocational assessment need to be examined in the diagnostic staffing conference, incorporated into the diagnostic summary, and used by the IEP team to develop the IEP.

Levels of Assessment

All school programs involve at least two levels of assessment. Tests and other instruments given to all students are the basis of *screening* as defined by the Missouri Department of Elementary and Secondary Education (DESE), Division of Special Education (See Figure 3.1, Step 1). Screening may be defined as the process of using data that are already available to determine strengths and weaknesses. When attempting to determine student strengths and weaknesses, staff need to answer such questions as:

1. Does the student have the readiness skills needed to succeed in a regular program?
2. Do screening assessment results indicate the possibility of a handicapping condition? If so, in what areas?
3. Will this student be able to live independently in the community as an adult?
4. Should this student enroll in college preparation classes, vocational education classes, general education, or some combination of these during the high school period?
5. Will this student be able to complete traditional higher education? Should this student enroll in postsecondary vocational training?

Figure 3.1 Steps in the Special Education Process

SEQUENCE AND NAME	PURPOSE AND PROCEDURES	OUTCOME/TIMELINES
1. SCREENING includes: a. Vision b. Hearing c. Health d. Social/Emotional e. Intellectual/Adaptive Behavior f. Academic/Prevocational/ vocational g. Speech/Language	Identify suspected physical, behavioral or emotional and educational problems which may significantly interfere with capability of achieving educational success.	Encourage accommodation of student in regular classroom rather than removal of student for special services. No timelines.
2. PRE-REFERRAL INTERVENTION STRATEGIES	Procedures occur periodically and continously. Modifications made in the regular program by regular teachers.	a. Progress is improved/satisfactory. b. Alternatives were effective. Need for comprehensive diagnostic assessment does not exist. c. No timelines.
3. REFERRAL a. List reasons for referral and descriptions of concern. b. Describe attempts to remedy the concern (Step 2).	Review all existing information provided by teacher and school records (screening information).	Determine appropriate outcome. a. No evaluation is necessary. b. Recommend educational strategies if not previously attempted. c. Recommend obtaining medical or psychological assessment. d. Recommend medical care. e. No evaluation at present; recommend continuous observation. f. Recommend multidisciplinary assessment. g. Recommend single discipline speech assessment.

4. INDIVIDUAL ASSESSMENT PLAN DEVELOPED *Steps*: a. Review all current screening information. b. Determine additional information needed in each area. *Areas of Functioning*: a. Vision b. Hearing c. Health d. Social/Emotional e. Intellectual/Adaptive Behavior f. Academic/Prevocational/ Vocational g. Speech/Language	Determine which procedures to use: Interview Case history Observation Informal Formal Criterion-referenced Standardized	Determine individuals to administer procedures: (Use of multidisciplinary team)
5. INTENT AND CONSENT FOR ASSESSMENT	Describe assessment to be conducted. Explain reason for assessment. Describe information indicating need to including screening results, student and teacher records, and results of alternative intervention strategies attempted.	a. Notice and consent for assessment delivered to parents. b. Parents signature. Thirty (30) day timeline from here to diagnostic staffing conference.

SEQUENCE AND NAME	PURPOSE AND PROCEDURES	OUTCOME/TIMELINES
	Describe types of procedures and tests to be used. Describe use of assessment findings. State parents' rights and insure procedural safeguards.	

	— State parents' right to refuse permission and right of district to request hearing if permission is refused. — State parents' right to review copies of evaluation information and be informed of results. — State parents' right to obtain independent evaluation. — State parents have been informed of procedures for which consent is given and all procedural safeguards explained and understood.	
6. ASSESSMENT	Determine existence, nature and extent of handicapping condition. Provide detailed information on students current functioning as basis for Steps 7, 8, and 9.	Student assessed within 30 days of parent's signature.
7. DIAGNOSTIC STAFFING CONFERENCE	Examine findings, consider significance of information. Conference structure to include: a. Presentation of problem, reason for referral and assessment. b. Review of background information c. Report by individuals administering collection procedures for areas of functioning, scores, and interpretation of findings. d. Discussion of findings from these procedures in relationship to student's functioning.	Identify student's strengths and weaknesses, educational needs, and formulate a diagnosis of handicap if one exists. a. Determine strengths, weaknesses. b. Determine priorities/educational needs. c. Formulate diagnosis and basis for determination (eligibility criteria). d. Completed within 30 days of Step 5.

SEQUENCE AND NAME	PURPOSE AND PROCEDURES	OUTCOME/TIMELINES
8. DIAGNOSTIC SUMMARY	*Synthesize data* into written summary reflecting total functioning of student based on information collected. It is not a listing of isolated pieces of information.	All information from areas of functioning is the summary to provide basis for the IEP statement (present level of performance) and goals and objectives. Includes: a. Existence and nature of handicapping condition. b. Basis for determination using eligibility criteria.
		c. Relevant behavior (observation). d. Relationship of behavior to academic functioning. e. Educationally relevant medical findings. f. Effects of environmental, cultural, or economic disadvantage. g. Team members agreement to conclusion or attached statement if in disagreement. h. List strengths and weaknesses. Write so that everyone can understand what is going on and why.
9. IEP DEVELOPMENT *IEP Team* includes: a. Representative of LEA qualified to provide and supervise provision of special education (other than teacher.) b. Student's teacher(s). c. Parent(s). d. Student, when appropriate. e. Other individuals as per parent or school discretion.		Complete IEP major components include: a. *Present level of performance* - includes characteristics unique to student derived from diagnostic summary information and synthesized into narrative of strengths and weaknesses in areas of functioning. b. *Goals and objectives* - based upon information in present level of performance. c. *Evaluation criteria, procedures, schedules* - specifies level of performance student must demonstrate to indicate achievement of objectives, types of evaluation procedure to be used, and expected time line for achievement.

	f. Someone knowledgeable about assessment procedures and able to interpret results of initial assessment.	d. *Provision of services* - includes types of service to be provided (special education and related), time spent in regular classroom, and determination of placement. e. IEP committee participants. f. Must be developed within 30 days after student is determined to need special education and/or related services.
10. NOTICE AND CONSENT TO PLACE	a. Notify parents. b. Obtain parents' permission.	a. Parents consent or reject placement. b. Student placed or LEA determines next steps to work with parents.

SOURCES:

Missouri Department of Elementary and Secondary Education, Division of Special Education. (March, 1983). *Fiscal Year 1984-86 State Plan for Part B of the Education of the Handicapped Act as amended by P.L. 94-142.* Jefferson City, MO, 26-28, 34, 41, 45-51, A-11/A-19, A-23/A-29.

Missouri Department of Elementary and Secondary Education, Division of Special Education. (July, 1983). *Resource Guide for Special Education I-B: Identification and Initial Programming.* Jefferson City, MO, 5-26, 31-71, 81-96.

Screening should occur at each age level by a review of existing data, interviews with parents and students to determine their expectations, interviews with and ratings by teachers, and other informal assessment instruments. In the Missouri special education guidelines, the regular teacher makes prereferral modifications in teaching strategies to accommodate the individual learner's needs. Once these modifications are evaluated by the teacher and principal, the student is either referred for further assessment or the decision is made that no further assessment is needed.

If prereferral strategies are not successful, the student is referred for special education assessment and the assessment plan is developed based on all available information. A multidisciplinary team assesses the student to determine existence, nature and extent of the handicapping condition. This assessment is diagnostic and should provide clues for teaching (Figure 3.1, Step 6). To determine eligibility for special education, the question to be answered is: What is (are) the handicapping condition(s) of the student? By the time the special education student is entering junior high school, the following question needs to be answered: Is vocational programming the most appropriate placement for this student, and, if so, what programs are appropriate? (Cobb, 1985). Often this question is answered by a vocational assessment that occurs when the student is being re-evaluated for special education purposes.

Vocational assessment is part of academic assessment in the special education guidelines (see Figure 3.1) and is required under the Carl D. Perkins Vocational Education Act for special needs students entering vocational-technical education programs (Federal Register, August 16, 1985). As the student is preparing to leave the elementary school, the vocational component must be considered. The Missouri Department of Elementary and Secondary Education, Division of Vocational and Adult Education, provides these guidelines for implementing the Carl D. Perkins Vocational Education Act.

1. Identify at what stage of preparation the student is currently (vocational awareness, exploration, or preparation).

2. Identify the occupational area(s) in which the student has interest, aptitude and ability.

3. Identify what particular learning requirements (special needs) will need to be met if the student is to succeed in a specific vocational program.

4. Identify a tentative job title, potential employment outcome or post-school goal for the student that would lead to an appropriate vocational program placement.

This evaluation is to occur in Missouri to enrollment in vocational-technical education classes.

Three levels of vocational assessment are outlined below:

Level I. *Screening* is simply reviewing all information currently available for helping a student plan to become a worker.

Level II. *Teacher and counselor administered instruments* in such areas as career maturity, job readiness, interests, aptitudes, and work-related behaviors should be available in each school through the counseling office. Counselors and teachers often provide assessment services to help students understand themselves. This assessment may be either at the screening or diagnostic level depending upon whether it is given to all students at the school and the extensiveness of services. Content areas vary but may include interests; needs and motivation; family relationships; maturity or readiness; knowledge about the world of work; knowledge of the role as a citizen and user of leisure; abilities, values toward school, work, and other roles; and level of commitment.

Level III. *Comprehensive vocational assessment* occurs in specialized settings such as vocational assessment laboratories and is administered by a specialist in vocational assessment (North Dakota, 1984).

Figure 3.2 Method for Developing an Assessment Plan

	AREAS OF INVESTIGATION	CURRENT SCREENING INFORMATION	ADDITIONAL INFORMATION NEEDED	DATA COLLECTION PROCEDURES	PERSON TO ADMINISTER PROCEDURES
CAREER	HEALTH (including motor development and need for Adaptive Physical Education)				
VOCATIONAL IMPLICATIONS	VISION				
	HEARING				
	SPEECH AND LANGUAGE				
	INTELLECTUAL-COGNITIVE (including adaptive behavior)				
	SOCIAL AND EMOTIONAL (environmental)				
	ACADEMICS (including Prevocational and/or Vocational)				

All special education students must receive Level I vocational assessment in order to be in compliance with the *Missouri State Plan of the Education of the Handicapped Act as Amended by Public Law 94-142* (1983). Level II is necessary if the career/vocational planning is not possible after completing Level I. Level III, comprehensive vocational assessment, is necessary when further information is needed after completing Level II. A fairly high functioning learning disabled student who knows what he/she wants to do should stop at Level I if the goal is realistic and the student knows how to plan for that goal. The student who does not know what he/she wants to do or has unrealistic plans needs Level II assessment, which involves career maturity and interest inventories, aptitude testing, and use of occupational information to find where his/her interests and abilities match. He/she must also assess whether he/she has the readiness and persistence to complete both entry level and task requirements of the career. If answers are determined to a level seen as realistic by the student, parent and school officials, vocational assessment stops here. The student who cannot meet this criterion needs a comprehensive assessment that will include "hands-on" materials. A Level III assessment usually requires 10 to 30 hours of time.

Planning the Assessment

Each student, while possessing many characteristics in common with other students, is an individual. To meet the individual needs, an individualized assessment plan is important. Step 4 in Figure 3.1 is labelled the Individual Assessment Plan. A method for developing the assessment plan is summarized in Figure 3.2. The career/vocational aspects of each component need to be determined for the individual student. This step prepares the LEA staff for both Step 5, the intent and consent for assessment, and Step 6, the actual assessment. The same process is used for the vocational component but possesses additional content areas. If the student graduates without adequate employment skills and is referred to a vocational rehabilitation center, a parallel process will be used in the rehabilitation center to provide further assessment.

Assessment Setting

Assessment should occur in familiar environments where students feel safe and secure. This means that as much assessment as possible should occur in the home school. If outside specialists are needed, results should be more reliable when equipment needs allow the specialist to come to the school. When elaborate health, medical, or vocational equipment or materials cannot be transported, it is important that students be given time to acclimate to the new surroundings before initiating the assessment process. The assessment environment is extremely important if one expects to obtain accurate results. Distractions influence all students to various degrees. Both the physical site and interpersonal climate are part of the assessment environment. The most essential element, however, is not the location of the assessment unit but a spirit of cooperation between assessment specialists, regular educators, special educators, vocational educators, and students.

Personnel Responsibilities

Appropriate assessment is based on a team approach. Special education teachers, counselors, school psychologists/psychometrists, and health personnel including speech and language specialists provide both screening and comprehensive assessment to identify special education needs and justify labelling. Teachers are primarily responsible for curriculum-based assessment including assessment of life skills objectives. Counselors assess for additional data at the home school and vocational assessment specialists assess at the area vocational-technical school. Curriculum-based assessment (Deno, 1985) of the vocational curricula is the responsibility of the vocational teachers.

Important personnel roles include the following:

*** Permission granted for reprint.**

Return to: VOCATIONAL EVALUATION
AND ASSESSMENT
GRAFF VO-TECH SCHOOL
815 N. SHERMAN
SPRINGFIELD, MISSOURI

— VEAC REFERRAL FORM —

Name _____ Sex: _____ Date of Birth: _____

Address _____ Phone: _____

Parents Name (if minor): _____ Social Security # _____

Highest School Grade Completed: _____ Currently in school? Y_____ N_____

Emergency Contact: _____ Relationship: _____

Handicapped: _____No _____Yes Disadvantaged: _____No _____Yes

How: _____ How: _____

Reason for Referral:

_____ Comprehensive evaluation of skills and interests

_____ Specific referral questions: _____

_____

Has client been involved in previous training?

_____ No

_____ Yes What area? _____

Test previously administered: (include interest, aptitude, achievement, intelligence.)

Name of Test	Date Administered	Results
1.		
2.		
3.		
4.		
5.		
6.		

Medical information pertinent to evaluation: (seizures, heart, back problems)

_____

_____

_____

Other information pertinent to vocational evaluation: (behavior, concerns)

_____

_____

_____

Referring Person: School or Agency:

Phone: Preferred date for evaluation _____

Preferred time of day for evaluation: AM _____ PM _____ Evening _____

Signature _____ Signature of Administrator _____

White VECA Copy Yellow Counselor Copy Pink Administrator Copy

Special Educators

1. Learn as much as possible about the vocational-technical school's policies including: admissions, curriculum, support services, and placement activities as well as the vocational assessment program. Be knowledgeable.

2. Provide all information requested by the vocational assessment specialist. This should include a copy of the individual assessment plan, all current assessment data, and IEP.

3. Initiate long-range planning early. By the middle school grades, begin to ask such questions as "Will vocational education be an appropriate placement for this student when he/she reaches late secondary school programming?"

4. Use appropriate resources to determine the competencies students need in order to be successful in vocational education such as Entry Level Skills Criteria. (Cameron and Johnson, 1983; Flanagan, 1984).

5. Prepare the student to assume the role of a worker as an adult. This is a long-term process that should begin in the early elementary years and continue throughout the public school years. Teach generic career competencies during the junior high years and in high school if necessary. Activities include using interest inventories; presenting occupational information through field trips and community members visiting classes; directed reading; encouraging student conversations with parents about their work and teacher-led discussions (Brolin, 1983).

6. Prepare the student for the vocational assessment process (short-term) by such activities as discussing the upcoming event, answering questions, having a staff member from the vocational assessment center visit the class, and having a student who has completed a vocational evaluation describe his/her experiences.

7. Request Level I or II vocational assessment of student when the student is re-evaluated in the 6th, 7th or 8th grade.

8. Use the vocational assessment data in the placement decision for the following year. The data may reflect the need for additional special education instruction prior to placement in vocational education.

9. Assist parents in understanding the need for the development of skills rather than years in school.

Counselors

1. Assist special education personnel in providing the information that the vocational evaluator needs to expedite Level III vocational assessment of each student.

2. Coordinate services with special education teachers in conducting Level I vocational assessment of each student. This is equivalent to a conference wherein current data on students are screened for career and possibly vocational training options.

3. Conduct Level II vocational assessment with special needs students by the eighth grade. Interests inventories and ability tests are within easy access of counselors. Special needs may be assessed jointly with teachers using observation and behavior rating scales, learning style inventories, and interviews.

4. Assist teachers in providing career education learning activities to their students.

5. Assist parents plan with their handicapped or disadvantaged student by focusing on skills for daily living, personal-social roles, and occupational roles.

6. Serve as an on-site person to help special education teachers and other staff understand vocational assessment reports.

Vocational Evaluator

1. Request data from the sending schools. Staff may not know what data are needed and what data will reduce the length of vocational assessment time. Conference with the referring staff member(s) when more information is needed.

2. Take time to learn about the programming at the sending schools as resources vary from LEA to LEA. Be realistic in expectations from different sending schools.

3. Develop a public relations campaign to establish a need for and realistic expectations from the vocational assessment service.

4. Give the student time to acclimate to the assessment lab before starting the "real" assessment. Use such things as vocational screening instruments for this purpose when appropriate. Instruments where practice is allowed are appropriate.

5. Develop an individual assessment plan based on student needs and data available before the student arrives. Modify the plan based on data acquired during the vocational assessment.

6. Prepare the assessment report as soon as possible after a student completes assessment. Make certain that the report answers the referral questions and includes understandable and realistic suggestions regarding vocational education programming, work-study program placement, or job placement (depending upon the reason the assessment was requested) and specific skills for IEP development.

Some LEAs will have additional staff members such as a vocational resource educator (VRE) who will facilitate the vocational assessment process. As a rule, these personnel coordinate or facilitate rather than providing the actual assessment. They may, however, assume some of the responsibilities of the special educator, counselor, or vocational evaluator depending upon available personnel and local division of duties.

Personnel involved in making a referral for a comprehensive vocational assessment may find the sample referral form helpful in designing their own form. Such a form is beneficial to the evaluator and should be completed and transferred to the assessment center for all disadvantaged students and for handicapped students if the diagnostic summary is not transferred.

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CHAPTER 4.
SELECTING ASSESSMENT INSTRUMENTS

Individual needs of each student are the most important criteria for selecting assessment instruments. Factors involved in considering student needs should include at least the following:

Age,

Current program placement,

Known strengths and weaknesses,

Previous assessment results, screening and previous evaluations,

Reason for referral for assessment, and

Student aspirations.

Needs of individuals differ substantially. Reasons for doing an assessment include: to determine progress of students currently in special education, to justify continued programming, to make adjustments in placement, to meet mandated assessment or reassessment schedules, to measure perceived change in the student, to assist general program planning, to identify readiness for specific program entry, and to determine the level of student aspiration or motivation.

Basic Guidelines for Selecting Instruments

The actual selection process is a very important part of assessment. This involves knowing as much as possible about the student and about instruments. Several steps are useful as a guide to selection.

1. Study the available information on the student in order to know what information is needed. Obtain the cumulative folder, review teacher comments, grades, and achievement scores to discern patterns that may have developed.

2. Spend at least a few minutes conferencing with the referring teacher, student and parents. Often it is helpful to talk to each parent separately as their perceptions sometimes vary substantially from each other.

3. Know the strengths and weaknesses of each available assessment instrument. Choose instruments to balance these strengths and weaknesses.

4. Repeat assessment that will duplicate information only when the information needs to be verified. For example, staff are concerned that achievement or behavior has changed, a new level of cognitive processing is required, or different concepts are being taught and the student seems to be reacting much less favorably than before.

5. Determine the referral person's specific objectives for assessment and assess to meet these objectives. Referring persons will provide more specific objectives as they learn what the assessment specialist needs.

6. Choose reliable instruments. A coefficient of .70 to .80 is usually considered a minimally acceptable level of reliability for tests and work samples.

7. Use instruments that are valid for the present assessment objectives and for students to be assessed. For example, interest inventories given to fifteen-year-old students are valid for a present indication of interests, but not for predicting what one's interests will be at age sixteen or twenty one. They are valid as a present indicator, however, only when the student is capable of responding adequately and responds honestly.

8. Choose instruments within your competence. The specialist must be trained appropriately to interpret certain levels of tests (see Ethical Issues) and must spend adequate time in learning specific instruments. Persons not adequately trained may cause many problems by failing to make adequate distinctions between similar constructs such as aptitudes and skills. A person may have a high aptitude for clerical work but may possess a low skill level due to lack of training and experience. Often inadequately trained persons tend to think that aptitudes and interests correlate highly with each other.

9. Select instruments with adequate and appropriate norms. Adequate norms are determined by sample size for specific groups of individuals. Criteria for adequacy vary according to the types of instruments being considered. Group tests of achievement and intelligence should have thousands in the norm group and at least hundreds at each age level. Instruments designed for individual administration may have adequate norms with 100-200 people in each age group. Appropriate language for the students involved is extremely important, especially for students for whom English is not their first language. Age is also a factor in appropriate norms. Other factors are gender, ethnic background, geographic area, type of community, socioeconomic class, grade level, or job entry criteria. Norms are appropriate when the individual student is compared to a group of similar students or to a group with which he/she is to compete in the immediate future. A further criterion is that norms must be current. Some of the old tests are among the best available when the norms have been updated.

10. Select instruments that assess students so that their abilities, not their disabilities, are maximized. For example, P. L. 94-142 mandates testing in one's dominant language whether it be Spanish, American Sign Language, or another language (U. S. Government, August 23, 1977).

11. Know the purpose for which an instrument was designed and use it for only that purpose when using its norms. This is necessary because of standardization. If the use is different from the intended purpose or if it is necessary to alter the administration, results can be used only for informal assessment. Sometimes, however, an informal assessment is the appropriate use with handicapped students.

12. Select both standardized, i.e., formal, and informal instruments as each have strengths and weaknesses.

13. If two instruments have equal validities and all other qualities are equal, choose the instrument with the shortest administration time unless endurance is a factor to be assessed.

14. Begin assessment in the elementary school in order for handicapped and disadvantaged students to learn test-taking skills learned by non-special needs students.

15. At the secondary and postsecondary level, choose instruments that will make students aware of their likes and dislikes, work environment, work ethic, learning/working style, commitment, readiness and the personal intrinsic and extrinsic rewards of school and work.

16. Make sure that the student is comfortable in the assessment relationship in order to maximize motivation and attention.

Quality instruments need to be chosen on the basis of individual student need. Students with high verbal skills may be evaluated successfully on the basis of tests and inventories. Students with low to average verbal and cognitive skills need additional evaluation provided by performance samples from school or work and rating scales. Students with very low verbal and cognitive skills may need to be evaluated using a task analysis where the task components are evaluated, taught individually, then chained together. The latter students need to be placed in individualized training programs based on their learning skills. More capable students generally need less assessment to determine appropriate career placement for training. It should also be noted that the assessment process is likely to cause more stress and fatigue for the handicapped student than his/her regular program. Stress and fatigue factors should be considered in planning the assessment process.

Methods of Collecting Information

No single instrument or method of assessment is adequate or valid for assessing a student when used as the only criterion. The best approach is to use as many different types of assessment instruments as possible. Instruments may be classified as formal and informal assessment.

Formal Assessment

Formal assessment typically involves standardized instruments, many of which are tests. Several, but not all, commercial work sample systems meet sufficient criteria to be considered formal assessment. Criteria associated with formal instruments include:

1. Standardized directions for administration and scoring,
2. Reliability studies,
3. Validity studies,
4. Substantial numbers of persons involved in the norm group or agreed-upon criteria by a substantial number of experts for criterion-referenced instruments,
5. A theoretical/research base of knowledge,
6. Standard scores, and
7. A substantial manual for the user.

Results of formal assessment are usually used to meet legal requirements such as student identification and classification. Achievement test scores may be helpful for instructional planning. Common types of formal assessment are:

1. Achievement tests,
2. Intelligence tests,
3. Paper - pencil aptitude tests,
4. Personality tests,
5. Manual dexterity tests,
6. Work samples and work samples batteries, and
7. Interest inventories.

Informal Assessment

Informal assessment is based on less standardized techniques. Often these are administered by classroom teachers and other educational professionals. Standardized tests administered in a modified manner are also informal assessment. Sometimes it may be necessary to administer a test using both standard and modified approaches. Some informal tests are also referred to as diagnostic and clinical tests. "Clinical" is used in its generic sense, not as in medical or clinical psychology connotations. The concept is simply to individualize assessment approaches until the right one is found for the individual. Informal instruments may not have norms. Often instead, the student is compared to some absolute standard such as correct performance of a task where a definitive correct answer exists as in mathematics or in reading and spelling. Many informal instruments are subjective ratings. Their purpose is to identify the students strengths and weaknesses and to plan instruction and career guidance. Informal assessment is ongoing and may include performance of home work, desk work, unit tests, etc., and include courses such as career exploration. Reviewing cumulative records is informal assessment. Advantages of informal assessment are that the instruments are directly related to teaching programs, allow assessment of specific skills, directly involve the instructor, and are simply designed for specific purposes. Data may include rating scales that reflect either the teachers' teaching style and needs, the students learning style and needs, the school setting, methods and strategies of instruction, and experiences outside of school (Guerin and Maier, 1983). Types of informal instruments include:

1. Teacher made achievement tests,
2. Role play and other situational assessment,
3. Diagnostic reading and math tests,
4. Interest inventories,
5. Anecdotal records,
6. Observation, behavior rating scales and checklists,
7. Entry level skills inventory,
8. Interviews, and
9. Performance samples (some commercially distributed work samples, homework and various assignments including worksheets).

Curriculum-Based Measurement

Curriculum-based measurement (CBM) is a third type of measurement that is useful for prescribing instruction and monitoring progress of IEP objectives designed to avoid some of the weaknesses and to utilize some of the strengths of both formal and informal assessment. Major criticisms of standardized achievement tests are that they do not measure short-term gains, are not designed for frequent administration, do not relate to local curricula, and are not useful for making instructional decisions. Informal assessment, much of it based on observation, is subjective and its reliability and validity are not known. An advantage of CBM over informal assessment is that of standardizing the observation of curricula performance. Students are assessed frequently over curricular tasks and both the student and teacher have feedback regarding what has and has not been mastered. Data may be used to describe individual learning and may be combined to provide normative data when desired. The major advantage, however, is that academic achievement is measured often, is based on local curriculum, and is a reliable and valid way to assess learning (Deno, 1985).

Missouri's Instructional Management System (IMS), of which the Vocational Instructional Management System (VIMS) is a part, is an example of curriculum-based measurement. Competency tests designed by local and state educational agencies are additional examples. Missouri uses the Basic Educational Skills Test (BEST) and is developing others for various school grades. The Entry Level Skills Criteria (Flanagan, 1984) are another example of materials to assess competency to enter vocational training programs. Exit Level Criteria (Flanagan, 1984) and Vocational-Technical Education Consortium of States (V-TECS) are examples of performance-based exit criteria. Deno (1985) points out that school districts and states create their own competency tests rather than adopting those developed elsewhere. This suggests that students are likely to perform differently when taught through a different curriculum. Preliminary research suggests that CBM is a technically adequate approach for monitoring mastery of the curriculum and that it can be used for screening, program planning, and program evaluation for special needs students (Marston and Magnusson, 1985; Deno, 1985). This approach appears to offer a great deal of promise because of its monitoring capabilities. Monitoring is an important part of the ongoing assessment process for teachers of special needs students in a era of accountability.

Assessing Special Populations

Special populations, identified in the Missouri State Plan (1983), are the mentally retarded, specific learning disabled, speech and language, behavior disordered, visual impaired, hearing impaired, physically impaired and other health impaired, and multiply handicapped. Many students who are physically impaired, multihandicapped, and severely speech and language impaired have need of assistive devices to help them function closer to competitive levels of nonhandicapped persons. Assistive devices will be discussed in the sections dealing with these specific assessment issues (see chapter 5). In addition to these groups, a section is devoted to disadvantaged students (also found in chapter 5).

Some persons with severe disabilities must be assessed with psychometric instruments developed for or normed on a disabled population, or modifications must be made in existing instruments. Examples of disability groups are the hearing impaired, noncommunicative/language disabled, visually impaired, orthopedically handicapped, and some mentally handicapped students. They may, however, be assessed for occupational skills and potential by using standard work samples and community job tryouts. Potential problems such as time limits, fatigue, specific item content, individual administration of a group instrument need to be considered (Botterbusch, 1976). Experiential deprivation is a factor to be considered for all of the severely disabled population (Foster, 1977).

Instruments to Assess the Whole Person

Multicomponent assessment is necessary to assess the whole person. When planning for or with the student, regardless of age, it is important to have information about all areas of functioning. Hence, the special education division specifies seven areas of assessment (see Figure 3.2) important for identification and instruction. Comprehensive vocational assessment also encompasses the total person as he/she considers entry into vocational education, work study, or employment. Research indicates that for the disadvantaged and handicapped, like the nonhandicapped, that work-related factors such as attending to tasks, punctuality, and dependability are more important in keeping a job than are job skills. This is true for several reasons. Among them is the capability of employers to screen job skills more accurately than job-related skills (Roessler and Bolton, 1983). Job-related behaviors/skills are important for special, regular, and vocational teachers to address if graduates are to be successful on the job and in life in general. Hence, these need to be assessed and the level of skill reported in each assessment report.

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CHAPTER 5. ASSESSING SPECIAL POPULATIONS

The basic guidelines of chapter 4 apply to all individuals. However, due to specific strengths and weaknesses of students resulting from disability, language, and environmental factors, different groups possess special concerns. These are briefly outlined in this chapter.

Mentally Retardation

Mentally handicapped students must be identified for special education on the basis of appropriate individually administered tests of intelligence such as the Wechsler Intelligence Scale for Children, Revised, and an adaptive behavior scale. Both intelligence, which educators see as general learning ability, and adaptive behavior, the ability to meet everyday life expectations, must be substantially below average for a student to quality as mentally handicapped (Missouri DESE, 1983).

Criteria to consider in selecting assessment devices for mentally handicapped students include:

1. Age. Instruments must be age-appropriate. For example, the WIPSI, WISC-R, and WAIS-R are intelligence tests designed for different ages.

2. Verbal level. Verbal skills depend upon the age and the severity of disability in each mentally handicapped individual. Instruments must be chosen within the individual's skill range. These skills may range from non-functional reading to moderate levels.

3. Learning time. Mentally handicapped may need a longer learning time to comprehend what is expected of them. Some instruments, such as the Vocational Information and Evaluation Work Samples, contains a learning phase to be completed prior to the production phase.

4. Assess functional skills, especially at the secondary and postsecondary level. Knowing what the person can do such as independent self-care is more important for planning than is reassessing the academic strengths and weaknesses.

Specific Learning Disabilities

Students with specific learning disabled students must be identified for special education by a multidisciplinary assessment team using appropriate individually administered tests of intelligence and achievement. The team must find that the student has a severe discrepancy between intellectual ability and achievement in one or more of the following areas: oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematics calculation, and mathematics reasoning. A severe discrepancy is defined in Missouri by standard deviations for grade levels:

Grades K-2	.75 Standard Deviation
Grades 3-9	1.00 Standard Deviation
Grades 10-12	1.50 Standard Deviation

These levels of discrepancy may exist for reasons other than specific learning disabilities, however. Staff must rule out visual, hearing and motor handicap, mental retardation, emotional disturbance, and environmental, cultural, or economic disadvantage as the primary cause of the discrepancy. Three questions must be answered to justify the label of a specific learning disability.

1. What has the student learned and what is his/her present achievement level?

2. What is the student potentially capable of learning and how can this potential be measured?

3. What amount of discrepancy between achievement and potential must exist to be considered significant or severe?

Both intelligence and achievement tests scores involve error and the severe discrepancy can occur by chance (MODESE, no date).

Criteria to consider in selecting assessment devices for specific learning disabled students include:

1. Choose intelligence and achievement tests with the least possible amount of reading.

2. Observe the student in class to determine preferred modes of learning.

3. For students old enough to be within the target population of learning styles inventories, administer the one that seems most appropriate.

4. When possible compare intellectual assessment results between two or more multidisciplinary assessments or reassessment.

Speech and Language Disorders

Students with speech and language disorders must be identified by appropriate instruments to determine the nature and extent of communication disorders (language disorders, speech disorders, and augmentative communication), communication as a basic skill, and communications variations (dialects and bilingualism or non-English speaking). Mild problems in communication as a basic skill, such as delayed speech or language and communications variations, are not to be considered as handicapping conditions for special education programming. These last two categories will often be identified through screening and by teachers. Speech and language specialists may need to assess the student in order to distinguish between developmental delays and communications disorders. Appropriate instruments are identified in the Speech and Language Disorders Resource Guide (Missouri, April, 1984).

Speech and language disorders is the only category approved for single discipline rather than a multidisciplinary team assessment (Missouri, April, 1984). However, this specialist is always interested in information from other professionals, especially the classroom teacher. If screening indicates any problems beyond that of oral communication, a multidisciplinary assessment is necessary. Speech and language disorders are less likely to interfere with assessment in academics including vocational, behavior, and general life functioning than when a student has very limited speech and needs augmentative communication.

Persons unable to talk sufficiently to express their ideas cannot be assessed in most areas with assurance that the results are valid. Augmentative speech aids such as communications boards, electronic machines, and computers can help. However, speed is a factor as these devices can be programmed to communicate routine expressions but not specific answers for the assessment process. Many persons who are unable to talk are unable to use their arms, hands, or fingers which reduces options for communication. Many augmentative devices can be operated with special switches thus allowing students to communicate. The rate may be much slower than usual speech rate, however.

Specific ways to modify the assessment process are:

1. For students with adequate dexterity, use non-verbal instruments.

2. For students with communications devices, choose instruments without time limits when possible. When this is not possible, ignore time limits, test for capacity, and note the exception in the report.

3. Use pretrials to orient the student to what is expected.

4. Convert motor tasks to visual tasks. The student can be instructed to look at rather than point to the preferred choice.

5. Convert verbal tasks to visual tasks when possible.

6. Use larger materials (blocks, dolls, puzzles) for manipulation when such manipulation skills are within the student's potential.

7. Have student use pointers when the use is within student's ability.

These modifications should be helpful to any member of the multidisciplinary team who assesses students possessing severe communications problems. When standardized tests are modified as described here, the results must be treated as informal data (Missouri, April, 1984).

Behavior Disorders

Students with behavior disorders present a variety of behaviors, are not easy to diagnose, and their behaviors may alter performance levels on assessment devices. As defined by Missouri's State Plan, behavior disorders/emotional disturbance is defined as marked manifestations in learning difficulties over an extended period of time not explained by cultural, intellectual, sensory or other health factors; interpersonal relationship difficulties with peers, parents, and teachers; "a general pervasive mood of unhappiness or depression; and a tendency to develop physical symptoms, pains or fears associated with personal or social problems" (Missouri, 1983, p. A-14).

Behavioral characteristics which may affect assessment results include:

1. Difficulty in attending or concentrating,

2. Lethargy or its opposite, the inability to sit or talk at appropriate times,

3. Giving answers that are tangential,

4. Giving answers that contain reference to physical illness or personal problems.

Assessment instruments usually do not need to be modified. However, results pertaining to potential and achievement should be interpreted cautiously as they are apt to be lower than actual performance would be without the problems. Extra efforts should be exerted to establish a good relationship with these students. The examiner should be careful to use all of the reinforcement allowed when administering standardized instruments and to remove stimuli that could cause distractions.

Visually Impaired

The medical definition of blindness is having "vision in the better eye when corrected of less than 20/200" (the visually disabled person sees at 20 feet what a fully sighted person sees at 200) or peripheral vision of less than 3 degrees (AMA, 1934, p.2205, in Botterbusch, 1979) is not particularly helpful to educational assessment personnel. However, Botterbusch (1976, p. 3) provides a definition which is pertinent: "the inability to perceive and read sentences, words, letters, numbers, equations, etc., in the form that they appear on a standardized test or answer sheet." This definition applies to all types of instruments. Age of onset of disability is a factor in blindness just as it is in deafness. Concepts such as shape, color, and visual components of the environment, like clouds, are understood more easily by the person who had vision for an extended period of time. Some research suggests that blind persons tend to emphasize speech, pay close attention to verbal stimuli, and may score higher than average on verbal tests (Botterbusch, 1976).

Partially sighted students have sufficiently limited acuity to require specific educational compensation of a significant nature if school learning needs are to be met. Generally their central vision acuity falls between 20/70 and 20/200 or less in the better eye after correction or they have peripheral vision of 20 degrees or less. Usually these students use print of some size as their primary education medium.

Evaluation of visually impaired persons must be completed by a multidisciplinary team including an ophthalmologist. Specific guidelines for the assessment are provided for LEAs (Missouri, January, 1984) and include not only components of vision but how the student functions in the educational environment in such areas as auditory functioning, intellectual ability, and social skills.

Specific ways to modify assessment instruments include:

1. Use pretrials to make student aware of what is expected during the assessment.
2. Use large print materials when appropriate for the student.
3. Use braille for students who can read braille.
4. Extend time periods for persons taking braille tests because a person reads braille about one-third as fast as a sighted person reads print.
5. Have student repeat instructions to the person administering the instrument to check for understanding.
6. Allow students to sort items into piles when appropriate (such as items on cards) in inventories that can be answered "yes, no, don't know", "true-false", etc.
7. Present items orally when materials allow for this type of presentation and the student has adequate auditory skills. If presented on tape, make sure tape and player are of good quality.
8. Provide appropriate ways for the student to record answers such as typewriter or braille stylus (Botterbusch, 1976).
9. Avoid flickering lights and eliminate glare.
10. Administer instruments in short blocks of time (Foster, 1977).

Hearing Impaired

Before beginning an assessment of a severely hearing impaired student, the assessment specialist needs to know both the severity of the loss and the age of onset of the loss. Since communication is the basis of assessment (Watson, 1976), the assessment specialist must know whether he/she can communicate adequately or if an interpreter will be necessary. Ideally, the assessment specialist who assesses deaf students is a certified interpreter. The level of language is important as many items may utilize constructs that are not part of the student's experience.

Hearing loss affects not only speech but more importantly, it affects language development. For example, when a large difference is obtained between verbal and nonverbal scores and the person hears at 25 decibels, the hearing loss has probably had a substantial effect on communication skills (Foster, 1977). The person who was born unable to hear is deprived of normal access to language and is limited to visual and tactile input cues. The person who becomes functionally deaf around the age of two may, like Helen Keller, have learned a large amount of language skills already. Persons who can hear when the level of sound is at 55 to 70 decibels but who cannot hear when the sound is not this loud will have considerable difficulty unless conversation is directed exclusively to him/her (Mindel and Vernon, 1971). Assessment by regular staff in educational facilities is problematic if the student's hearing is at 70 decibels or greater as this level represents a 75-80 percent hearing loss (Davis, 1970). Hearing aids may be helpful but will not compensate for extensive loss of hearing. Assessment personnel should consider the following factors when developing the assessment plan:

1. Know the student's life history well enough to know how hearing has affected development, especially communication. This includes age of onset, age when disability was discovered and treated, and present age.

2. Deaf individuals frequently possess a low level of language development. Determine the student's communicative needs and the setting in which communication can occur easily.

3. The assessment specialist must watch his/her own cues as the hearing impaired rely heavily on visual cues.

4. Students deaf from an early age may be perceived as a culturally different group. This has implication for individual items on tests, inventories and work samples (Botterbusch, 1976).

5. Determine if other physical, mental, or social/emotional impairments are present.

6. Appraise the type, amount, and success of previous and current rehabilitation/habilitation services.

7. Know the individual's reaction and the reaction of others to the hearing impairment (Missouri, July, 1983).

8. If hearing loss is less than 15 decibels, assess with the same procedures and instruments as used with non-hearing impaired but move the student near the examiner (Foster, 1977).

Specific ways to modify assessment instruments for deaf students are:

1. Use pretrials as a means of orienting the student to what is expected during assessment. A mock test or a related work sample may be used.

2. Use low literate and nonverbal tests if possible when using psychometrics as reading and language levels typically are low (80% below grade 4.9) according to Botterbusch (1976).

3. Have student repeat instructions to the examiner.

4. Sign the instructions to the student in his/her preferred language while speaking the identical instructions. Students who lipread will benefit from the spoken instructions when the administrator stands so that lips can be read.

5. Determine ahead of time how to announce when the time limit has been reached for timed instruments. Examples are movements of the hand and flipping light switches.

6. Color code some paper-pencil and apparatus tests such as "red" for right and "green" for left hands on the Purdue Pegboard.

7. Demonstrate the procedures used and allow the students to practice when this will not invalidate the results (Botterbusch, 1976.)

8. Administer the instrument in the mode preferred by the student, such as written notes, pantomime or sign language.

9. Administer instruments in shorter blocks of total time such as two sittings instead of one when these instruments have separate components (Foster, 1977).

Assessing severely hearing impaired persons is complex as both the present level of hearing and the age of onset of hearing loss affect language development. Psychometrics tend to be less valid than performance samples because of restricted language development and the limited use of English as the major language.

Physically Impaired/Other Health Impaired

Behavior of individuals in this category can vary extremely due to the particular type of disability, how the disability has affected the person, the degree of compensation achieved by the student, and medications that the student is currently taking. Physically impaired individuals often are restricted in their ability to move about, sit, or manipulate educational materials as a result of muscular, neuromuscular, or skeletal abnormalities. Health impaired students may have low levels of strength, vitality, alertness, or endurance due to health problems. These restrictions must interfere substantially with regular instruction in order for the student to be placed in special education.

Once the physical or physiological problem has been diagnosed medically, a comprehensive educational assessment must be completed by a multidisciplinary team. Specific guidelines have been provided by the Missouri Division of Special Education (Missouri, May, 1985). Many of these students can function more effectively with the use of assistive devices. Mobility and manipulation devices may be most helpful. The range of devices is broad. Simple devices that help the student hold a pencil or weight paper in place are examples of low technology and low expense. Page turners and reading machines are examples of mid-level technology while microcomputers with special attachments or programs are an example of high technology and high expense range. These devices may, after an adequate learning period, make a substantial difference in performance. Students assessed prior to using assistive devices may need to be reassessed after they learn to use their device efficiently.

The basic principle for selecting instruments is to select the most appropriate instruments that can be used with the least modification. When modifications are made, make notes to that effect in the report. When students can respond in an alternative mode, use the alternative mode, such as pointing or responding visually to a correct answer. Omit sections that are beyond the student's capacity to respond. The omission may cause the data to be suspect but more useful than if the omission had not been made.

Specific ways to modify assessment instruments for physically handicapped are:

1. Adjust time limits when warranted.
2. Adjust the manner for recording answers.
3. Administer in short periods of time when fatigue is a factor.
4. Remove distractible stimuli (Foster, 1977).

Multihandicapped

Multihandicapped individuals refers "to a primary physical or health impairment with one or more additional handicapping conditions which are educationally significant to the extent that they interfere with regular instructional techniques" (Missouri, May, 1985, p. 3). The combination of impairments must make the student's education impossible to achieve in a program for a single disability. Both medical and comprehensive educational assessment are essential for this group of students.

Multihandicapped students may need assistive devices more than any other group. Often they need sophisticated equipment in order to allow semiindependent functioning. These may include alternative speech, electronic control of equipment and power supply (as turning lights and appliances on and off), and mobility assistance. A wide variety of "off the handicapped shelf" equipment is available and rehabilitation engineers work in a number of centers to develop individualized equipment for members of this group.

Educational assessment, even with assistive devices in use, is often difficult to complete with accuracy. Staff would determine the best approach to assessment for the individual. Some may have severe orthopedic disabilities but have good speech. Others may have neither. Assessment guidelines are:

1. Choose instruments with which student can use his/her strength areas to respond.
2. Adjust time requirements for each section of the instrument when appropriate.
3. Adjust the manner in which answers are recorded. The examiner may need to do the recording.
4. Use all assistive devices that the student is accustomed to using.

Disadvantaged Students

The term "disadvantaged" means individuals (other than handicapped students) who have economic or academic disadvantages and who require special services and assistance to enable them to succeed in vocational education programs. The term includes persons who are members of economically disadvantaged families, migrants, have limited English proficiency (LEP), are school dropouts, or are identified as potential dropouts. LEP students a) were not born in the United States or have a native language other than English, b) come from a home where a language other than English is relied on for communication, or c) is an American Indian or Alaskan native from an environment where a language other than English has had an impact on the level of English language proficiency, and as a result have sufficient difficulty in understanding, speaking, reading, or writing the English language to deny him/her the opportunity to learn successfully in classrooms where English is the language of instruction (Missouri DESE, 1985). Academics used to establish disadvantagement are the basic school subjects such as reading, language usage and mathematics. For the Carl D. Perkins Act, academically disadvantaged means scoring below the 25th percentile on a standardized achievement or aptitude test, having a secondary grade point average of below

2.0 on a 4.0 scale, or failing to attain minimal academic competencies (Missouri DESE, 1985). These students often become discouraged and may drop out of school. Because they are discouraged, they may lack the initiative to try.

Hoffer (1983) cites several reasons why students may be academically disadvantaged. Inaccurate assessment, irrelevant instruction, and the lack of special assistance may each contribute to the problem. Assessment is intimately connected to cultural background. Persons whose background is different from the majority culture are not assessed appropriately when they are administered instruments designed for the majority and administered by a member of the majority culture. Results from such instruments may produce false low expectations from faculty who then reinforce what they expect to see. The results may also be used as a basis to provide inappropriate instruction or may not be used at all, resulting in instruction designed for the average child rather than the specific needs of the student. Hence, when special assistance is needed in developmental reading, for example, assistance may be inappropriate or unavailable. Since most skill development in the elementary school is sequential and developmental, students who fail to master skills at each level have difficulty at subsequent levels.

Disadvantaged students respond better to individual assessment when provided by an interested, encouraging staff member. More effort is expended by the student when the reason for learning is understood. Hence, vocational assessment may provide secondary school students with a rationale for learning basic school subjects.

Specific guidelines to help in choosing assessment instruments are:

1. Choose instruments that resemble typical school tasks as little as possible.
2. Choose low literate and nonverbal instruments when they are available and valid for the purpose being assessed.
3. Relate assessment and learning to real life situations as much as possible.
4. Choose low level verbal instructions to explain assessment tasks when possible.
5. Rely on behavioral observations to support or negate formal assessment results.
6. If not known, determine reading level before administering instruments where reading is involved in either the directions or the instrument.
7. In assessing for a vocational training area, survey the language requirements of the area to make sure that they and the assessment instruments are equivalent (Wentling, 1985).

Specific requirements have been established under the Carl D. Perkins Act for assessing and educating disadvantaged students in vocational education comparable to the requirements for handicapped students (Missouri DESE, 1985).

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CHAPTER 6. REPORT WRITING

Report writing is an important aspect of vocational assessment. A well written assessment report can be a valuable tool in the educational process for program planning, instruction, and counseling. A well planned quality report must communicate facts and provide answers to certain important questions about a student and his/her planned endeavors. If this is not done, the assessment itself is of little value.

The effective assessment report is a logical, well planned, carefully written means of communicating vital information about a student. In special education this information should be incorporated into the diagnostic summary reflecting how assessment results relate to the student's total functioning. Good reporting does not come about easily. It depends upon an intellectually alert, trained, and widely experienced educator who is concerned about the interests and needs of the student.

It may be helpful to look at an assessment report as one would a research paper where one begins with a problem, develops a hypothesis, collects data, and draws conclusions. Similar steps can be followed during assessment and the subsequent written report. Problems to be solved will stem primarily from the referral questions or other assessment rationale. An effective report will contain only significant findings that have been separated from unessential information. The report can discuss the student's strengths and weaknesses, referral questions, learning problems, learning styles, and general adjustment problems. The report should make suggestions appropriate for the student to explore. The report may also carry information of significance to other persons who may function to help the student solve academic, vocational, physical, mental health, or social problems. It is important for a report to be concise but comprehensive.

In-service training for professionals who write as well as read assessment reports is helpful. An orientation which provides a review of available assessment processes and examples of reports will assist members of multidisciplinary teams in making better assessment choices as well as assisting them in making better use of assessment report data.

Types of Assessment Reports

Chapter three provided information regarding the organization of the assessment process. It is important to consider the levels of vocational assessment when formulating an assessment report. Special education students may not require a vocational assessment report as the data must be synthesized into the diagnostic summary. A Level I vocational assessment report focuses upon a review of existing information and should be completed at the local school. A Level II assessment report, if required, should include all the information contained within a Level I report plus assessment information obtained in such areas as career maturity, job readiness, self-rating forms, interests, aptitudes, and work-related behaviors. The Level III vocational assessment report should be comprehensive in nature and would generally be written by a specialist in vocational assessment. Sample reports are included at the end of this chapter.

A special education student should have all assessment information incorporated into the diagnostic summary regardless of whether a vocational assessment report is written. Remember that the diagnostic summary includes general information, case history/screening information, current evaluation results, and diagnostic conclusions. This is particularly important when a vocational assessment occurs after a diagnostic summary has been written.

Disadvantaged students do not have a diagnostic summary or an IEP. Generally, counselors would be responsible for Level I and II reports for this population. If a disadvantaged student is being considered for early entry into a vocational program, an Individualized Vocational Education Plan (IVEP) must be developed based upon assessment results. As with special education students, a Level III vocational assessment report should generally be written by a specialist in vocational assessment. This report should follow the same basic outline as the diagnostic summary. Within the three levels of assessment, reports may take many different forms. Those forms may be:

1. Verbal,
2. Brief summary,
3. Fill-in-the-blank or checklist list forms,
4. A list of tests, inventories, rating scales and work samples with ratings,
5. Narrative, or
6. Any combination of these.

Few readers develop meaningful understandings from raw data or checklists. However, a long narrative report will likely go unread. For this reason, a combination of concise reporting forms is most appropriate.

For the person not yet comfortable with writing reports, following an outline may prove helpful. The outline can suggest subtopics that are normally needed in a report. It is important that the writer use the outline only as a guide for writing rather than as a rigid design. A rigid design can create a stereotypic effect on written reports. Styles of writing vary with people, and the writer should develop his/her own format.

Among the questions to consider when writing assessment reports are:

1. Are spelling, punctuation, grammar and typing correct?
2. Does the report respond to referral questions and/or assessment rationale?
3. Is the report clear and concise?
4. Are student strengths and weaknesses stated within the report?
5. Are the summary and conclusions supported by the assessment information?
6. Are present levels of performance clearly stated so they can later be used in the development of IEP goals and objectives?
7. Does the report contain unexplained contradictions (i.e., between student behavior and performance)?

These are a few of the most obvious questions to consider in writing assessment reports. Other questions will become apparent during the writing of specific assessment reports.

The assessment report is a vehicle to report specific knowledge about the student which can be shared with the student, parents, and other school personnel. A well written assessment report significantly increases the value of the evaluator's appraisal and can help bridge the gap between what the writer has learned about the student and what other professionals need to know to help the student in his/her career decision making.

Information for Report Writing

The following is a detailed list of information which can be included in an assessment report. It generally parallels what would be found in a Level III comprehensive vocational assessment report and may provide ideas for structuring Level I and II assessment reports.

General Information

A certain amount of identifying information about the student should be included at the beginning of every report. This includes:

1. Student's full name,
2. Date the report was written,
3. Period covered by the report,
4. The student number and/or social security number,
5. Date of birth,
6. Home address,
7. Age and grade in school,
8. Phone number,
9. Pertinent medical information,
10. Who prepared the report, and
11. Referral source.

Reasons for Referral/Screening Information

The report should include the referring person's reasons for requesting assessment services for the student. Those reasons allow the report reader to identify what was to be accomplished by the assessment. This section may also include information about areas such as the student's disability, educational background, family environment, work experiences, and linguistic and cultural influences. However, it should not be a comprehensive case history. Only information which is pertinent to understanding the student's problems and prognosis should be emphasized.

Assessment Results

The educational, psychological and vocational instrument results section should be a summary rather than a step-by-step report of all assessment. Information that has a bearing upon the student's ability to achieve his/her vocational goals needs to be emphasized. Since the use of standardized tests generally is considered to be an integral part of the evaluation process, all test scores and data may be included in appendix form and attached to an assessment. The results of work samples and situational assessment should be summarized to include the most important information about the student's work performance. The report writer can state specific information about a student's strengths and weaknesses on work samples. However, detailed information on individual work samples can be added in appendix form. It is important to get the student's opinion of the job tasks and work samples. It is also important to note that work samples may be used for exploration purposes and are not necessarily evaluated by time and quality norms.

Work habits and behaviors which limit or enhance the student's vocational development can be included in this section. Without conscious effort, emphasis is likely to be on negative performance; however, one must be careful to include the positive behaviors. Actual behavioral observations using action verbs should be utilized in describing student performance. Observations should be accompanied by a statement of the frequency with which the behavior occurs. Labels such as "bad," "unmotivated," and "inappropriate" should not be used because they are subjective terms and do little to increase the understanding of the student's behavior. It is possible to develop one's own behavior rating scale or use one already available. These scales can be included in the appendix as a supplement to the report. They can also be incorporated within the body of the report itself with some narrative/checklist types of reports.

Physical characteristics may be included within the report. This information estimates a student's ability to undertake training or work for a full day in view of his/her physical limitations, general health status, and physical stamina. This assessment information should be based on observation and performance of the student in the school or work environment rather than on the medical history alone. The evaluator *must* be aware of the student's medical history in order to avoid placing him/her in training or job situations which may be hazardous. If no physical limitations are present in the evaluation, merely state the fact and continue.

Unusual situations should be noted. For example, a child who is from a minority culture may not be assessed validly using the personnel and instruments available. Language differences, communications difficulties, and orthopedic handicaps are examples that should be stated in the report. These factors affect the reliability and validity of results.

Summary and Conclusions

The summary and conclusions section is the most important section of the report. Regardless of the information contained in the other sections of the report, a well written summary determines more than any other section the overall impact and subsequent usefulness of the report. The student's input and reactions to the evaluation should also be included in this section of the report. A composite picture of the student is presented, emphasizing the student's assets as well as limitations. The summary and conclusion section must be specific as this section forms the basis for the present level of performance and will be used in the development of the goals and objectives of the IEP/IVEP.

The final section of this chapter includes sample evaluation reports. It is important to develop reports that fit local evaluation situations. The following reports are included only to provide ideas for use in the development of locally specific evaluation reports. The evaluation report will likely be unique to each school and should definitely be specific for each student.

References

Pruitt, W. (1977). Report writing in vocational (work) evaluation. In *Vocational work evaluation*. Menonomie, WI: Walt Pruitt Associates, pp. 213-221.

Sample Format 1

DIAGNOSTIC SUMMARY FORMAT

SECTION 1: GENERAL INFORMATION

Contains demographic information regarding the child, parents, address, also student's name, age, grade, where testing occurred, dates of testing, and examiners involved.

SECTION 2: CASE HISTORY/SCREENING INFORMATION

Reasons for evaluation—summary of district screening information, evaluation plan, and alternative interventions tried.

A. Information from the Home

1. *Family History*

   Brief history includes information such as student's parents, siblings, occupation of parents, etc.

2. *Developmental History*

   Brief paragraph includes information related to the developmental aspects of the student, if information is available.

B. Information from the School

1. *School History*

   Includes such items as the following: CA and dates when child entered school, school progress, attendance, dates student attended schools, any record of moves, retention, previous difficulties.

2. *Existing Screening/Previous Evaluation Results*

   Description of procedures used, dates administered, and results.

3. *Alternative Interventions Tried/Teacher Comments*

   Describe the alternative interventions tried and summarize any comments and observations made by the student's teacher.

SECTION 3: CURRENT EVALUATION RESULTS

Information from this point in the Diagnostic Summary reflects the data collected from the case history/screening and/or additional formal and informal assessment procedures administered addressing all areas of functioning.

A brief description of each formal assessment instrument should be provided. Results should be reported and briefly interpreted/ summarized in terms of implications for school progress and/or relation to diagnosis. Grade levels, percentiles, standard score, etc. are important, but also valuable are the specific strengths and weaknesses observed (student's responses, errors, attempts, methods used in completing task).

Informal assessment procedures should note relevant behavior observed by student's teacher and persons other than the student's teacher. The relationship of those behaviors to the student's academic functioning should be described in relation to diagnosis and student's strengths and weaknesses.

A. *General Health* - including motor development and educationally relevant medical findings
   1. Case history/screening
   2. Evaluation/screening
      a. Formal
      b. Informal
   3. Strengths and weaknesses

B. *Vision*
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

C. *Hearing*
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

D. *Academic Performance* - including readiness/vocational/prevocational when appropriate
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

E. *Intellectual/Cognitive Ability* - including adaptive behavior
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

F. *Communication* - including speech and language
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

G. *Social/Emotional*
   1. Case history/screening
   2. Evaluation
      a. Formal
      b. Informal
   3. Strengths and weaknesses

SECTION 4: DIAGNOSTIC CONCLUSIONS

A. *Existence and Nature of Handicapping Condition*

Based upon the data collected and reviewed, a determination is made regarding a handicapping condition.

B. *Basis for Making the Determination*

A narrative describing the information used to determine the student's eligibility should be developed based upon a synthesis of the case history, screening, and formal and informal assessment information. The basis for determination of eligibility should include consideration of the effects of environmental, cultural, or economic disadvantage. The narrative should also clearly indicate that the categorical eligibility criteria have been met.

SECTION 5: PROGRAM CONSIDERATIONS

Summary of strengths and weaknesses based upon synthesis of the case history/screening and formal/informal assessment information. These strengths and weaknesses will form the basis for the present level of performance and will be used in the development of the goals and objectives of the IEP. ***These statements should NOT include a program placement recommendation.***

SECTION 6: STAFFING PARTICIPANTS

Signature of Staffing Participants

Team members certify in writing that the diagnostic summary reflects their conclusions. If it does not, the team member(s) submit a separate statement.

Sample Format 3

VEAC GENERAL ASSESSMENT REPORT/LEVEL II

CLIENT:
DATE OF BIRTH:
SOCIAL SECURITY NUMBER:
REFERRING AGENCY:
EVALUATION PERIOD:
EVALUATOR:
DATE OF REPORT:

THE CONTENTS OF THIS REPORT ARE BASED ON TEST DATA AND OBSERVATIONS COLLECTED DURING THE EVALUATION PERIOD. INDIVIDUAL CLIENT PERFORMANCE DURING THE EVALUATION SHOULD NOT BE THE SOLE DETERMINANT OF CAREER ABILITIES NOR DECISIONS.

SAGE

The SAGE evaluation system is a general assessment for overall coordination, dexterity, and general educational levels. This is a general profile assessment based on short term timed tasks. Testing includes a practice time and a test on each item assessed.

SAGE PROFILE:	*LOW*				*HIGH*
GENERAL:	1	2	3	4	5
VERBAL:	1	2	3	4	5
NUMERICAL:	1	2	3	4	5
SPATIAL:	1	2	3	4	5
FORM PERCEPTION:	1	2	3	4	5
CLERICAL PERCEPTION:	1	2	3	4	5
MOTOR COORDINATION:	1	2	3	4	5
FINGER DEXTERITY:	1	2	3	4	5
MANUAL DEXTERITY:	1	2	3	4	5
EYE HAND FOOT COORDINATION:	1	2	3	4	5
COLOR DISCRIMINATION:	1	2	3	4	5
GENERAL EDUCATIONAL DEVELOPMENT TESTING:					
REASONING:	1	2	3	4	5
MATH:	1	2	3	4	5
LANGUAGE:	1	2	3	4	5

VEAC GENERAL ASSESSMENT REPORT/LEVEL II

COMMENTS:

INTEREST INVENTORIES RESULTS AND COMMENTS:

VOCATIONAL SUMMARY:

EVALUATOR'S SIGNATURE _____

Sample Format 2

Kansas City Public Schools

NAME: _____

D.O.B.: _____

SCHOOL: _____ GRADE: ____

REFERRAL COUNSELOR: _____

EVALUATION DATE: _____ to _____

EVALUATOR's SIGNATURE: _____

REPORT DATE: _____

VOCATIONAL EVALUATION REPORT

KANSAS CITY SCHOOL DISTRICT
DEPARTMENT OF CAREER AND CONTINUING EDUCATION
SPECIAL NEEDS SECTION
1211 MCGEE STREET
KANSAS CITY, MISSOURI 64106
(816) 221-7565

CHECKSHEET

COMMENTS

		YES	NO
1.0	General Observations		
.1	Physical Appearance		
.1	Appropriate dress		
.2	Good personal hygiene		
.2	Communication		
.1	Spoke audibly		
.2	Articulated clearly		
.3	Expressed needs and feelings		
2.0	Interpersonal Situations		
.1	With Co-workers		
.1	Initiated conversation with women and men		
.2	Conversation did not interfere with work of self or others		
.2	With Supervisors		
.1	Accepted instructions (cooperative)		
.2	Accepted criticism without denying errors or excusing behavior		
.3	Accepted praise without negative reaction (suspicious, indifferent, reticent, angry, embarrassed, self-deprecating)		
3.0	Work Habits		
.1	Accepted work assignments readily		
.2	Rarely acted out when frustrated		
.3	Completed work assignments - rarely gave up		
.4	Worked independently		
.5	Self starter (began jobs after breaks/next day)		
.6	Sought assistance when necessary		
.7	Punctual		
.8	Dependable		
.9	Kept work and work area orderly and clean		
.10	Worked with minimum of errors		
.11	Corrected errors		
.12	Work pace steady		
.13	Performance improved with repetition		
.14	Followed rules		
.15	Organized work effectively		
4.0	Learning and Comprehension		
.1	Followed oral instructions with demonstration		
.2	Followed oral instructions		
.3	Followed a model		
.4	Followed a diagram		
.5	Followed written directions		
.6	Attention span sufficient to complete task		
.7	Learned in a reasonable length of time		
5.0	Job Skills		
.1	Told time accurately — hour		
	½ hour		
	5 minutes		
	1 minute		
.2	Accurate numerical skills — addition		
	subtraction		
	multiplication		
	division		
	fractions		
.3	Measured accurately — inch		
	1/2 inch		
	1/4 inch		
	1/8 inch		
	1/16 inch		
.4	Discriminated accurately — color		
	size		
	form		
	spatial relationships		
.5	Weighed accurately to specified amounts		
.6	Manipulative skills		
.1	Gross finger dexterity (½ inch and larger)		
.2	Fine finger dexterity (smaller than ½ inch)		
.3	Eye-hand coordination		
.4	Bi-lateral coordination		
.5	Used hand tools adeptly		
.6	Used power hand tools adeptly		
.7	Physical tolerance at acceptable level		

Name: _____

D.O.B.: _____

EVALUATION REPORT

NARRATIVE

RECOMMENDATIONS:

ADDITIONAL SERVICES NEEDED:

VOCATIONAL ASSETS:

VOCATIONAL LIMITATIONS:

VOCATIONAL INTERESTS:

Stated by student:

Tested: High Low

WRIOT

AAMD-Becker

DOL Checklist

Ideas

Realistic:

TESTS AND WORK SAMPLES

SCORING KEY

Time		Employment Level	Quality
85-100%	= 5 =	competitive	5
65- 84	= 4 =	entry level	4
45- 64	= 3 =	marginal	3
25 - 44	= 2 =	sheltered	2
below 25	= 1 =		1

SP (successful performance) requires a minimum of 3 in both time and quality.

TESTS

WRAT (grade level):
- Reading _____
- Spelling _____
- Arithmetic _____

Bender:

Developmental Drawings:

Memory for Drawings:

COMMENTS

TALENT ASSESSMENT PROGRAM	Time %ile		SP Yes	SP No
1. Visualizing structural detail				
2. Sorting - size and shape				
3. Sorting - color				
4. Sorting - touch				
5. Handling - small materials				
6. Handling - large materials				
7. Using small tools				
8. Using large tools				
9. Visualizing flow paths				
10. Memory for structural detail				

SINGER WORK STATIONS (DOT, 3rd edition)		Time	Quality		
Cooking and baking	(313.381)				
Cosmetology	(332.271)				
Data calculation and recording	(216.488)				
Drafting	(017.281)				
Electrical wiring	(829.887)				
Engine service	(620.281)				
Household & industrial wiring	(829.887)				
Medical service	(355.878)				
Needle trades	(787.782)				
Plumbing and pipefitting	(862.884)				
Refrig/heating/air cond.	(638.884)				
Sales processing	(289.458)				
Sample making	(709.381)				
Sheet metal	(804.281)				
Soldering	(812.884)				
Welding (gas)	(811.884)				
Woodworking/carpentry	(763.884)				

VALPAR WORK STATIONS	Time	Quality		
Clerical comprehension and aptitude				
Electrical circuitry and print reading				
Independent problem solving				
Whole body range of motion				

PERFORMANCE TESTS		Time %ile			
Bennett hand tool dexterity					
Crawford small parts dexterity:	Pins				
	Screws				
Purdue pegboard:	Right hand				
	Left hand				
	Both hands				
	R + L + B				
	Assembly				

WORK SAMPLES	Time %	Time No.	Quality		
Bagging I (10 minutes)					
Bagging II (30 minutes)					
Commercial art					
Counting					
Filing by name					
Filing by number					
Janitorial and housekeeping					
Measuring					
Pipe assembly					
Pressing (flat)					
Sign making					
Small parts matching					
Telephone assembly					
Telephone directory: white pages					
yellow pages					
Temperature					
Typing					

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CHAPTER 7.
INTERPRETATION OF EVALUATION RESULTS

Any comprehensive assessment will produce a great deal of information concerning a student. Figure 7.1 shows the types of information that can be obtained. This information is a *sample* of the student's performance and may not be a total picture of the student. As evaluators of information, staff first must make sense of the data. A good beginning is to look at the information in relation to what staff needs to know about the student. The information should give the answers to the following questions:

1. What are the student's interests? General and/or job specific?
2. What are the achievement levels in a reading, math, spelling? What compensatory methods are used or could be used in these areas?
3. What are the current work behaviors? (See chart on page 2.)
4. What are the strong aptitude areas (areas of potential proficiency)?
5. What are the current skills or strengths (areas of current proficiency)?
6. What is the preferred learning style of the student?
7. What areas are in need of remediation (cognitive, psychomotor or affective)? What can effectively be remediated? How?
8. What special needs does the student have? How can these needs be met?
9. Which available programs would help the student in terms of his/her interests, abilities, aptitudes, work habits, and special needs?
10. What support systems should be available to the student while in the recommended program? What systems should be considered following completion of the program?
11. What are the best ways to monitor the student's progress through the curriculum?
12. What process and product evaluation techniques can be used to determine competency levels in the recommended program?

Staff must gather information from others regarding these questions. Parents, teachers, counselors and the students themselves can often provide pertinent information during the evaluation.

Once these questions have been answered, a clear profile of the student's strengths and weaknesses has been obtained. In order for the evaluation to have an impact, others working with the student must also have this information. Interpreting results to others must be done with an understanding of the background of those individuals. Some agencies, such as the Division of Vocational Rehabilitation, may already be familiar with specific test results; however, few parents will have the background necessary to deal with interpretation of statistical results.

In order to explain the assessment results, the purposes of an assessment must be kept in mind:

1. To obtain relevant information about the student for use by professionals who make appropriate decisions,

2. To allow the student to learn something about himself/herself, and

3. To allow parents, counselors, teachers and others to look at the student's strengths and weaknesses in a realistic manner.

Students

The student should receive feedback frequently during assessment and all information obtained during assessment should be discussed with the student in an exit interview. From this discussion, the student should learn about himself/herself in relation to the world of work (see Figure 6.2). The strengths of the student should be stressed, with guidance toward potential successful training and employment. As students often forget or misinterpret information, it is helpful for parents, teachers, or counselors to review the results with them at a later date. The student should also be invited to a staffing to discuss assessment results. This may be an IEP meeting or a special meeting with parents and the individual student.

Figure 7.2 suggests types of information that should be communicated to those involved in the program planning with a student.

Counselors, Teachers, Resource Personnel

Dissemination of information to teachers, counselors and resource personnel (Figure 6.2) should expand their knowledge of the student's strengths, potential for success, and weaknesses needing remediation. The information should include:

1. Strongest interests areas,

2. Current abilities and strengths,

3. Learning styles,

4. Academic and occupational areas of greatest potential based on assessed aptitudes,

5. Options for junior and senior high students regarding appropriate placement for vocational training. These might include regular vocational training, work-study programs, career exploration of different areas, postsecondary training, and

6. Areas of weakness and suggested methods for remediation. Discussion should include roles or responsibilities of the professionals involved in the remediation/training process and the necessary support systems. From the interpretation of results, teacher and counselors, and resource personnel should obtain:

    a. Information to help in appropriate placement of the student,

    b. Goals to be included in the IEP or IVEP,

    c. Ideas for compensatory methods for remediation of behaviors or skills, and

    d. The support services necessary for the student to succeed in the vocational placement and in the world of work. Spell out clearly what support services need to be available such as adaptive equipment, written scripts for A/V materials, study guides for chapters, child care needs, transportation needs, math skills, assistance with oral or written directions, extra practice of lab skills, review and practice prior to tests, counseling needs, peer tutoring, use of family and friends for support, speech or physical therapy, special testing arrangements, referral to other agencies, and use of behavior contracts or other behavioral controls.

Figure 7.2
ASSESSMENT INFORMATION DISSEMINATION
Chart Should Have File

	Student	Parents	Teachers	Counselor	Community Representative **
Interests	X	X	X	X	*
Current Strengths/ Abilities	X	X	X	X	*
Achievement Levels/ Compensatory Methods	X	X	X	X	*
Work Behaviors	X	X	X	X	*
Learning Styles	X	X	X	X	*
Aptitudes	X	X	X	X	*
Occupational Options	X	X	X	X	*
Weaknesses/Modes of Remediation	X	X	X	X	*
Special Needs	X	X	X	X	*
Support Systems	X	X	X	X	*
Statistical Test Results	*	*	*	*	*
Written Evaluation Summary	X (if 18 or older)	X	X	X	*

* Information should be given if requested or needed by the individual in order to provide services to the student.

** Release of information is necessary.

Parents

When interpreting results of an evaluation to parents, the primary goal is to insure their understanding of the results. They should be given the information identified on Figure 7.2. This information, regardless of the student's age, should be related to the world of work or the future goals of their child. Parents should be encouraged to ask questions, to give examples of their child's behaviors to demonstrate their understanding of what is being said, and feel comfortable enough to dispute findings if necessary. Parents should be given information that:

1. Helps them see their child in a realistic manner,

2. Gives them options for their child's future, and

3. Suggests ways they can help prepare their child for his/her next placement, whether that be a vocational program, work experience, or academic classes.

Community Agency Personnel

What information is given to a community person depends upon that person's role in the life of the student. A *release of information* should be obtained from the parents or student (if age 18 or older) before revealing evaluation results to nonschool personnel. Judgment must be used when communicating results to community persons. If the person is familiar with statistical testing results, providing a copy of these results is appropriate. When the person is providing counseling outside of the school, it is beneficial for him/her to know as much as possible about the student. If the person is providing tutoring, then learning style information is vital. In essence, give as much information as necessary for the person to fulfill his/her role in providing services for the student.

Points to Remember in Interpreting Results

1. Use everyday language.

2. Concentrate on student strengths.

3. Be realistic.

4. Encourage questions.

5. Relate information to working and everyday living (what is acceptable in the adult world).

6. Be ready to explain specific examples of behavior, tests, etc. if a question arises.

7. Give suggestions of ways for each participant to help in the process. For example:

   Counselor: provide information on different careers.

   Teacher: work on measuring skills.

   Vocational Resource Educator: develop study guides for use upon entry into vocational program.

   Parent: talk to friends concerning a summer job; check weekly for assignments and go over them; give reminders of upcoming tests.

   Student: look for related summer employment; work on math skills in workbooks provided by teacher.

   Community Agency: provide counseling; search out funding sources for work experience or schools, solve transportation problems, etc.

8. Provide examples of vocational options and where they are available.

9. Describe changes necessary for the weak areas observed and explain why the changes are necessary for the world of work.

10. Offer ideas for transition from school to work including programs, support systems available, and contact persons.

References

National Center for Handicapped Children and Youth, (1985, October). Psychological testing of children with disabilities. *News Digest*.

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Sarkees, M. and Scott, J. (1985). *Vocational special needs*, Alsip, IL: American Technical Publishers, Inc.

CHAPTER 8.
USING COMPREHENSIVE ASSESSMENT RESULTS

The value of comprehensive assessment is determined by how the data are used. Students, parents, and school personnel need comprehensive assessment results to plan programs, and to develop instructional and counseling strategies. Each of these topics will be described in this chapter.

Program Planning

Program planning serves several purposes. Among these are meeting statutory requirements in special education, assisting the diagnostic staffing team in placing the student in the most appropriate educational programs, and helping the student and parent develop goals and objectives for school and life in general. This section focuses on meeting guidelines of federal and state statutes for program placement as implemented by the Missouri Department of Elementary and Secondary Education (DESE) in the state plans for implementing federal programs. For the sake of clarity, the procedures to be identified first are those of the Missouri DESE, Division of Special Education and second by the Division of Vocational and Adult Education. Not all disadvantaged or handicapped students are disadvantaged or handicapped for vocational education; instead, they must meet specific guidelines established by the Carl D. Perkins Vocational Education Act.

Division of Special Education

Program planning for the special education student must be accomplished by an IEP team after all assessments have been completed. The IEP conference follows the diagnostic conference, uses the diagnostic summary, and results in a written document. The IEP becomes a management tool for the individual student. Components of the program should follow the needs as identified through assessment as listed in the diagnostic summary. When the student is entering secondary school, the vocational component is an area which the Division of Special Education views as highly important as indicated by this statement: "The individual education program (IEP) team members should decide at a staffing whether or not and when a handicapped student needs vocational education" (Missouri DESE, 1981, p. 27). This is a screening decision. Vocational assessment should be a part of re-assessment as students approach the secondary years. Each student should be assessed for, and the results used to determine, an appropriate plan for the student's vocational training. For some students, an appropriate plan is college preparatory classes for college entrance. College preparatory programs may or may not include vocational education courses; other students should prepare to take classes at the vocational-technical school to prepare them for employment. Still others may need preparation for supplemented work, sheltered workshops, or on-the-job training. In other words, a junior-senior high school IEP is not complete unless the vocational component has been addressed. Both federal and state law stipulates that a full continuum of alternative placements and related services be made available to meet the needs of handicapped children. This includes prevocational (career) and vocational education.

Regardless of the student's needs, each IEP should contain subsections on:

1. Present level of performance,
2. Goals and objectives that are the long range and specific short-term desired behaviors,
3. Evaluation criteria, procedures and schedules, and
4. Provision of services that specifies the type, frequency and duration of services, time spent in regular classrooms, and the placement or educational model to be used to meet the student's needs (Missouri DESE, 1983).

Division of Vocational and Adult Education

Vocational-technical school offerings funded by the Carl D. Perkins Vocational Educational Act are being implemented in Missouri through a *Vocational Planner's Guide* (1985) which is distributed by the Division of Vocational and Adult Education, Office of Vocational Needs and Guidance Services. Some of the assurances that have impact for student program planning are:

1. Notification of vocational education offerings and their requirements for entry no later than the beginning of ninth grade (students and parents to be notified);

2. Equal access to handicapped and disadvantaged students in recruitment, enrollment, and placement;

3. Equal access to the full range of vocational programs;

4. Results of interests, abilities, and special needs assessment used to assist in formulating a realistic vocational plan;

5. Vocational education as a component of the IEP for handicapped students and an individualized vocational education program (IVEP) for disadvantaged students, when appropriate, and planned through a coordinated effort by appropriate vocational and special education representatives for special education students;

6. Specialized services such as adaptation of curriculum, instruction, equipment, and facilities designed to meet the students' needs as identified through the student assessment process; emphasis will be placed on mainstreaming in regular programs using resource personnel, supplemental staff, resource materials, basic skills instruction, and equipment;

7. Guidance, counseling and career development activities will be conducted by professionally trained counselors;

8. Transition from school to work will be facilitated through guidance and counseling services (Missouri, February, 1985, pp. 2-3).

Staff funded by the Carl D. Perkins Vocational Education Act are assigned primarily to the area vocational-technical school, community college, or vocational component of a comprehensive high school. Selected staff may travel to sending schools to coordinate services. They do not, however, relieve sending schools from their responsibilities of program planning. Using assessment results from a vocational assessment completed by an assessment specialist at the area vocational-technical school (AVTS) is a cooperative responsibility of the local school and the AVTS. The vocational assessment results should be incorporated into the diagnostic summary and used for IEP development for the special education student. The vocational assessment results should be used by the counselor to plan with the disadvantaged student and when indicated, to develop an IVEP.

The IVEP and the Four Year Plan

Each identified disadvantaged student who enters an AVTS program prior to the 11th grade must have an IVEP. An IVEP is recommended for identified handicapped students but the IEP will be accepted provided it meets the following seven components that are required for the IVEP:

1. Documentation of eligibility for early entry (disadvantaged student meets criteria of disadvantaged including limited English proficiency, or special education student meets the criteria of special education);

Figure 8.1

INDIVIDUALIZED VOCATIONAL EDUCATION PLAN

Prepared for _____ Expected Graduation _____

Vocational Goal _____

_____

	TENTATIVE CLASS SCHEDULE 1st Semester	2nd Semester	DESCRIPTION OF SERVICES
Grade 9 19__-__			
	Annual Goal _____ Attained? _____		
Grade 10 19__-__			
	Annual Goal _____ Attained? _____		
Grade 11 19__-__			
	Annual Goal _____ Attained? _____		
Grade 12 19__-__			
	Annual Goal _____ Attained? _____		
After Graduation			

Prepared By _____ Position _____ Date _____

Revised on: Comments (continue on back if necessary):

From Performance guide planning implementing, evaluating vocational special needs (p. 19) by C. Burchinal, February, 1984, Bismarck, North Dakota, State Board for Vocational Education.

2. Assessment completed to document the need for early entry and that the student can benefit from additional training;

3. The long-range vocational goal;

4. A tentative listing of courses to meet the student's overall education plan;

5. One or more annual goals with specific emphasis on the goals and objectives for early entry;

6. Description of the vocational services and activities essential for the student's first year in vocational education; and

7. Long range transition plan for the student on leaving the program and entering the world of work or getting further training.

In addition to these seven required components, three more are recommended as part of the IVEP:

1. Academic achievement (test scores, GPA, classroom performance, etc.);

2. Information on vocational interests, aptitudes and other abilities; and

3. Student strengths and weaknesses.

The IVEP presented in Figure 8.1 is a four year plan (North Dakota, 1984) for a student and reflects many of the required and recommended components. The other components may more appropriately be listed on a separate sheet so that a student may have his/her own copy without revealing confidential information. This sample may be used in developing local IVEPs. Local forms might have local required/recommended components listed.

Counseling Strategies

Counseling with students and parents is sufficiently important that it should occur prior to placement decisions for all students. Kapes and Mastie (1982) list counseling guidelines for those doing interpretation of assessment results. First, it is important to study suggestions for interpretation provided by assessment manuals and score report forms to determine which interpretations are supported by the data provided by the instrument. In order to prepare the counselor, teachers, students, and parents for the assessment results, the interpreter should review the goals and procedure of the instruments prior to assessment. The rationale for administering the assessment and what the instrument can and cannot do should also be reviewed with the student and/or parents. Other issues to be discussed should include who receives the assessment results, what the results cover, and how they will be used. While reviewing the background of the client, examine any factor that may have influenced the assessment results or have an impact on placement. These factors may include cultural and linguistic diversities, sex, handicap, and age. Seek out any other information that may be pertinent to the interpretation, especially if inconsistencies become evident.

Assessment results should be interpreted in the context in which the instruments were given. The background of the client must be a base for accurate assessment interpretation. No one instrument should be given dominance in interpretation. Information gathered from a variety of sources is necessary to determine appropriate school or vocational placement. Encourage the client to discuss how he/she feels about the assessment experience; his/her performance in the different aspects of the assessment; and the difficulties with which he/she was dealing (such as emotional distraction, fatigue, health problems, nervousness, etc.) during the assessment. Also, encourage parents to express how they feel about the assessment experience.

Good feelings can be fostered in a counseling session by the interpreter emphasizing the strengths of the assessment while objectively discussing the weaknesses. Enough time should be allowed for the student and parents to assimulate the information provided and comment or ask questions. The questions asked should be answered honestly and openly. The affective aspects of the feedback from the student and/or the family should also be observed. Carefully listening and responding to the feedback received from the student is an effective way to check actual understanding of the assessment results as well as serve as a sounding board for parents. Interpretation of assessment results is an excellent means for breaking down barriers between school personnel and the parents and students.

Educators must recognize, respect, and be responsive to the individual differences, needs, and abilities of all students and parents. Parents and students must be provided with practical and effective techniques for dealing with their lives successfully. It is not enough just to listen to parental and/or student concerns. Mutual understanding and empathy can form the foundation for a solid relationship. A primary goal for continuing this relationship should be to provide parents and students with effective strategies to deal with problems and concerns as well as learn new skills for appropriate adaptive behavior and career development. Parents and students welcome and need help to become active members of the planning process.

Using comprehensive assessment, the task is to identify appropriate academic, occupational and leisure time options for the student. Informing the student of other possible resources available for exploration of career guidance should result in student self-exploration. Assistance can be provided through field trips, career conferences, film strips, shadowing, library resources and career guidance. When the situation allows, it is helpful to monitor and encourage further career planning through follow through counseling sessions or referral. Counselors should use the data to help students, parents, teachers and other school personnel to develop appropriate plans and strategies to meet those plans from the beginning of school through vocational education training and the eventual transition to community living and working.

Instructional Strategies

Instructional strategies are planned based on the results of career assessment as defined in this manual. In order to assure quality instructional strategies, communication must occur between assessment and instruction personnel. This interaction should begin as early as possible and continue throughout the student's educational program. Instructional strategies are an integral component of the program planning process. Each should include short term and long term considerations. For example, the special education teacher should infuse career education into the curriculum from the first year of school. The junior high teacher should focus on entry level skills of vocational-technical education. This approach helps to focus upon exactly what is to be accomplished, who is to accomplish it, when it is to be accomplished, and by what methods it is to be accomplished. Instructional strategies involve communication, planning, modification, and evaluation.

Communication

Communication is very important in planning instructional strategies. Information gathered from parents, students, teachers, evaluators, counselors, and other professionals can be organized and synthesized into a summary of strengths and needs. Instructional strategies often allow educators to utilize an individual's strengths in remediating or bypassing weaknesses. The assessment process should provide teachers with the information they need to plan instruction such as skills mastered and learning styles, so they will not need to administer additional instruments for planning purposes.

Instructional Planning

Although instructional strategies are not contained within the IEP or IVEP except with the listing of special services needed, the planning for them should be based upon assessment results as the results indicate level of skills accomplished. Planning instructional strategies should take the holistic approach, gathering and processing relevant information from professionals, parents and students. During this planning process, appropriate strategies are formulated to address the needs of each individual involved. The ultimate goal of the planning process is to increase the quantity and improve the quality of input information. The product of this process is an education plan which includes effective instructional strategies for each student.

Modification of Instructional Strategies

Modification of instructional strategies takes many forms. The initial concern is whether the individual or the environment needs to be modified. For example, does the student need to change his/her behavior, or should assistive devices or alternative strategies and methods be used to modify the student's environment? Is the curriculum appropriate for the individual, or does it require modification to accommodate his/her achievement levels? Is the instructor using teaching strategies that correspond to the student's preferred learning style? As one considers each individual and his/her environment, many questions will be formulated and many will involve modifications as students move through programs. These questions are related and should follow a logical sequence.

Factors to consider in making modifications are:

— Are assistive devices necessary?

— Can they be purchased?

— What will they cost?

— Can they be made locally?

— How does this student learn best?

— How may the student demonstrate his/her skills?

— How long will the modifications take to show results?

Modification of strategies is the key to effective instruction and determines whether the individual attains specified goals and objectives.

Monitoring and Evaluation

The final component of instructional strategies is evaluation or monitoring whether instruction is successful. Monitoring the process must continue throughout the student's program even when the student appears to be succeeding. Monitoring consists of answering questions such as these:

— Who is responsible for the modifications?

— What effects will the modifications have upon the individual?

— What effects will the modifications have upon others?

— Are the modifications working?

— How are the modifications evaluated and additional changes made?

— Are communication, planning, and evaluation involved in the planning and implementation of the modifications?

— How often are modifications evaluated?

— What criteria are used to determine success?

Communication is important during the evaluation process as all individuals involved must be aware of the results. The chances are increased that the ev 'uations will be timely and accurate when staff members are highly trained observers. When problems are identified, new instructional adjustments must be made. Evaluation provides the instructor and support personnel with continous feedback about the effectiveness of the planned instructional strategy.

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Missouri Department of Elementary and Secondary Education. (1983, March). *Fiscal year 1984-86 state plan for part B of the Education of the Handicapped Act as amended by Public Law 94-142*. Jefferson City, MO: Division of Special Education.

Resources

SOURCES OF CONSTRUCTIVE SUGGESTIONS DEALING WITH ALL CONTENT AREAS

Alley, G. R. & Deshler, D. D. (1979). *Teaching the learning disabled adolescent*. Denver, CO: Love Publishing Company.

Brolin, D. (Editor) (1983). *Life centered career education: A competency-based approach*. Revised edition. Reston, VA: Council for Exceptional Children.

Feurerstein, R. (1980). *Instrumental enrichment*. Baltimore, MD: University Park Press.

Hallahan, D., Lloyd, J., & Stoller, L. (1982). *Improving attention with self-monitoring: A manual for teachers*. Charlottesville, VA: University of Virginia Learning Disabilities Research Institute.

Masters, L. and Mori, A. (1986). *Teaching secondary students with learning and behavior problems*. Rockville, MD: Aspen Publications.

Polloway, E., Payne, J., Patton, J., & Payne, R. (1985). *Strategies for teaching retarded and special needs learners*. Columbus, OH: C. E. Merrill Publishing Co.

Polloway, E. (1982). *Teaching language skills to exceptional learners*. Denver, CO: Love Publishing Co.

Schumaker, J., Denton, P. & Deshler, D. (1984). *Learning strategies curriculum*. Lawrence, KS: University of Kansas.

SOURCES OF CONSTRUCTIVE SUGGESTIONS FOR VOCATIONAL EDUCATION

Sarkees, M. and Scott, J. (1985). *Vocational special needs*. 2nd ed. Alsip, IL: American Technical Publishers, Inc.

CHAPTER 9. VOCATIONAL ASSESSMENT

Career assessment is culminated by vocational assessment, an assessment that uses all data to help the student make occupational decisions. A vocational assessment is the process of gathering information regarding a student's abilities, career maturity, motivation and interests related to vocational potential. This can be done both formally and informally. Pros and cons for using both are:

> Formal evaluation systems have their advantages such as being readily available, having detailed instructions for administration and scoring and access to norms allowing a comparison of the students scores with other individual's scores of the same age. The major drawbacks of formal evaluation systems are that they are very expensive and may not relate directly to local vocational programs.
>
> Informally developed evaluation units will not give the extensive information of a formal system but are less expensive, relate directly to local vocational programs, and are relatively easy to administer. In addition, they can provide educators and the student with the same basic benefits mentioned previously (Maxam, 1985, p. 2).

Levels of Vocational Assessment

Vocational assessment is often divided into three levels. Level I vocational assessment is the process of collecting existing information already available on a student. It is equivalent to the special education screening process in that no new assessment is conducted. Level I for the special education student is composed of reviewing existing data in the seven areas of special education assessment (vision, hearing, health, social-emotional, intellectual/adaptive behavior, academic/prevocational/vocational) as soon as the student is identified. Level I for the disadvantaged student is reviewing all existing school records and some of the areas included in special education assessment such as intellectual vision, hearing, and health information will be available if this screening is completed for all students.

If a programming or placement decision cannot be made with existing information, a Level II assessment must be initiated. This includes collecting and interpreting more information regarding the student's vocational potential. Personnel administering a Level II assessment must be trained in the administration and interpretation of the instruments administered. Many of the Level II instruments may be administered only by individuals with special training. When choosing instruments for a particular student, the reading level, math level, reliability and validity of the instrument and the student's learning style all must be considered. Counselors, teachers, or other personnel in the home school have primary responsibilities for implementing Level II assessment. Much more data will be available on special education students than on disadvantaged students.

If after completing and interpreting Level I and II assessments, appropriate placement decisions still cannot be made, a comprehensive vocational assessment or Level III assessment must be conducted by a trained vocational evaluator (*Vocational assessment*, 1982; *Vocational assessment*, 1984). Level III assessment is conducted at vocational-technical schools, comprehensive high schools, community colleges, and rehabilitation centers in Missouri. Referral should be made to a school-based assessment program when the vocational questions are related to vocational education training. Either school-based or rehabilitation-based programs may be appropriate for job placement decisions.

Establishing A Vocational Assessment Process

Robinson (1986) suggests the following considerations for the person thinking of initiating or expanding a vocational assessment program.

1. Determine a lead person responsible

   — take necessary coursework
   — delegate responsibilities
   — synthesize information and write reports

2. Analyze program needs and outcomes

   — entry/exit criteria
   — job placement
   — special considerations

3. Analyze student populations

   — functional strengths and limitations
   — ages
   — match-up with entry/exit criteria

4. Determine uses for assessment date (families, IVEP, counselors)

5. Identify constraints that govern assessment processes

   — data from sending schools
   — space
   — nature of time with students
   — scheduling
   — budget
   — access to other services, programs, agencies

6. Determine information that already exists in current records

7. Identify other information that is available without formal testing

   — from vocational/industrial arts staff
   — from former Chapter 1/special education staff
   — from middle/high school counselors

8. Identify assessment instruments the school currently has

9. Determine discrepency between what is currently available and what is needed to complete vocational assessment planning

10. Establish process needed to eliminate discrepency.

Types of Instruments used in Vocational Assessment

Instruments of all types are used in vocational assessment. One way of categorizing the instruments is the nature of their construction. This classification is: tests, inventories, job/task analysis, observation and rating scales (situational assessment), interviews, work samples, and try-outs. These will be explained briefly.

Tests

Tests are the oldest form of assessment used in education. They may be oral or written, developed for use within one classroom or for an entire nation of classrooms, designed to assess recent or cumulative learning, designed to assess the ability to learn, and for many additional purposes. They may be highly structured and administered strictly according to instructions or have little structure and administered informally.

Standardized, criterion-referenced, and curriculum-based tests each have their strengths and weaknesses. The best use of any test, however, is as *one* measure of the student rather than the sole measure. Any testing book in educational and psychological testing may be used as a resource to understand tests better.

Anyone using standardized tests should be qualified to administer and interpret the tests. The user should be aware of the purpose of the test, the test's reliability and validity, and understand the norming data used for the test. All standardized tests should be scrutinized closely for these items, and should result in useful information for teachers to use in planning the instructional process. Some advantages of standardized (or norm-referenced) tests are (Sarkees and Scott, 1985):

1. Student performance is measured in reference to large numbers of similar individuals.
2. The tests are often given in a group, are quick, easy to score and inexpensive to administer.
3. Reliability is generally greater than criterion-reference tests.
4. The results are precise and quantitative.

Criterion-referenced tests provide information pertinent to remediation in that they identify specific skills and deficits. Curriculum based assessment deals with specific school curricula and the tests are often locally constructed. They may also serve the purposes of criterion-referenced tests or may be general in nature. For a more thorough explanation, see the section on Achievement in Chapter 10.

Students being assessed or being re-assessed for special education services are usually given standardized tests on an individual basis. This can be time consuming and expensive, but gives a more accurate measure of the student's performance than a group testing situation. Disadvantaged students potentials will also be assessed more validly in individual testing. However, if a test used does not give direction and guidance to all teachers (both special and regular academic educators) regarding the student's strengths and weaknesses, it may not be an efficient means of helping the student. Refer to chapters 4 and 5 for guidance regarding acceptable modifications for assessing severely handicapped students using standardized tests.

Inventories

Inventories look much like tests but are different in that they usually have no correct answer. Inventories may be standardized but require the student to rank him/herself against some criterion. Interest and personality inventories are common examples. Inventories are useful when the student desires information about self. Testing books in the field of guidance and counseling treat inventories in some detail.

Job/Task Analysis

Job/task analysis is important in vocational assessment for several reasons. Almost any instrument must be based on criteria. For example, the components of any interest inventory must be analyzed before a scale can be developed to measure the interests; the tasks involved in reading must be assessed before reading tests can be developed; and work samples must be based on actual tasks of a job if the work sample is to be representative of the job. Some students may be sufficiently handicapped that the only way to assess or teach the student is to break the performance into component parts and assess or teach the components. Sarkees and Scott (1985) have identified performance requirements that should be included in a job analysis:

The primary tasks involved in completing the job;

Goods/services produced by the worker;

Specific knowledge needed for the job;

Equipment, machinery, tools, materials, and work aids used on the job;

Working conditions; and

Performance standards associated with the job.

Sources of job analysis information already available are:

V-TECS Catalogs
Available in Missouri from:
Instructional Materials Laboratory
University of Missouri-Columbia
10 Industrial Education Building
Columbia, MO 65211

Dictionary of Occupational Titles (DOT)
Superintendent of Documents
U. S. Department of Labor
U. S. Government Printing Office
Washington, DC 20402

Occupational Outlook Handbook
Superintendent of Documents
U. S. Department of Labor
U. S. Government Printing Office
Washington, DC 20402

Job analyses provide a basis for vocational-technical training. The student who can meet entry level requirements for training possesses a realistic basis for entering training.

Observation, Rating Scales, and Situational Assessment

Observation of students is a technique known to all school personnel. The term situational assessment is a rehabilitation term and involves observation as the primary technique. In vocational assessment the specialist observes the student in a work or simulated work setting to determine how he/she functions in the setting. This is important as students discouraged by school tasks often function differently in work settings.

Name _____ Date _____

PLANNING INTERVIEW

[All questions are to be recorded from Evaluee's perspective/perception unless otherwise indicated.]

1. Major/Minor Disability: [Do you have any handicaps or disabilities, anything that would interfere with getting or keeping a job?]

2. Medications: [Are you taking medication for anything now?] N Y _____ (name, dosage, etc.) [Have you ever been on medication?] N Y _____.

3. Physical capacities (limitations or restrictions in standing, sitting, walking, running or lifting):

4. Visual Problems: N Y Sometimes. Hearing Problems: N Y Sometimes. Last Screening _____/_____/_____

5. Vocational Interests:

6. Achievements:
   Grade Completed:
   Favorite Subjects:
   Club Memberships:
   Sports Teams:

7. Work Related Capabilities. [Describe a typical day.] (Listen for behaviors in some of the following areas, probe for omissions).
   Independent Living:

___ bathe	___ nail care	___ clothes selection	___ checkbook/savings
___ shower	___ shave	___ phone use	___ budget
___ shampoo	___ make-up	___ money use	___ public transportation
___ brush teeth	___ shoe care	___ tell time	___ hobbies & leisure:

   Housekeeping:

___ wash surfaces	___ wax	___ sweep	___ take out trash
___ vacuum	___ make beds	___ launder clothes	

   Cooking:

___ set table	___ mix	___ fry	___ use mixes
___ carry food	___ cut	___ bake	___ measure
___ open cans	___ core	___ broil	___ follow recipes
___ pour	___ dice	___ boil	___ plan meals
			___ grocery shop

8. Work Skills & Work Tolerance. [What skills do you have that would help you achieve your vocational goal?] (Able to use this skill with present physical ability?)

9. Relationship with Family: (also, kind of job held)
   Father:
   Mother:
   Brothers:
   Sisters:
   Others in home:
   Others out of home:

10. Vocational Background: (where, when, employer's name, how long, what type of job, reason for leaving, like/dislike)
    Odd Jobs:

    Volunteer:

    Vocational Training:

    Employment:

Source: Judy Lawson, Kansas City Technical Center, Kansas City, MO

Interwoven with observation is the process of rating students and workers. The classroom and a work or simulated work setting provide the opportunity to use rating scales to record behaviors. Brolin (1976) states several advantages of using situational assessment in vocational assessment. It:

1. Simulates real work;
2. Provides observation of social and interpersonal relationships as well as hands-on skills for the job;
3. Is less time-consuming than formal or informal work samples;
4. Is not expensive;
5. Provides assessment conducted in a more natural work environment, and;
6. Allows several professionals an opportunity to observe and interpret behavior.

Situational assessment is highly similar to vocational program and job site try-outs, but may involve simulated work tasks. The latter may be considered an example of situational assessment (see vocational programs and job try-outs).

Interviews

Interviews with the students, teachers, and parents/guardians are the guidance component of the assessment process. Advantages of interviewing the student, teacher and parent/guardian are: 1) the input received from all three for understanding the student, 2) the opportunity for feedback to students, teachers and parents/guardians and 3) opening the communication process.

The person conducting the interview needs to have a good rapport with the student, teacher, and parents. This person may be the student's teacher, counselor, or assessment specialist and may use an interview form or guide to insure consistency with each interview. A form useful for a planning interview is provided at the end of this chapter.

Work Samples

Sarkees and Scott (1985) define work samples as "activities that simulate real work tasks and are closely associated with actual jobs in the labor market. They emphasize performance skills rather than verbal or written skills and incorporate the tools and standards associated with the actual job" (p. 104).

Advantages to using work samples include:

1. Actual work behavior is observed in a controlled setting;
2. Students obtain practical hand-on experiences helping them identify strengths and weaknesses, determine realistic career goals, and generate interest in vocational programs;
3. Evaluators obtain information regarding work habits, manipulative and interpersonal skills, physical abilities and work capacity, and;
4. Results provide career counseling program development and job placement information (Sarkees and Scott, 1985).

Work samples can be purchased commercially or developed locally. Figure 9.1 identifies the advantages and disadvantages of both commercially and locally developed systems. Personnel who wish to develop a work sample will find the following outline helpful. If the work sample is to be used informally, the developer may stop with step 7b.

*Outline for Work Sample Development**

1. Determine need for work sample

   a. Conduct follow-up studies of students to determine job areas of training/placement
   b. Conduct community job survey to determine demand areas
   c. Compare results of follow-up and survey with current evaluation program
   d. Develop list of job areas not assessed by current work evaluation process
   e. Select job areas for work sample development based on demand/training/placement criteria

2. Determine requirements of work sample

   a. Conduct job analysis of job or use existing job/task analysis such as V-TECS
   b. Interview incumbents and supervisors to determine critical requirements and behaviors
   c. List three similar jobs using Dictionary of Occupational Titles (DOT), Entry Level Skills Criteria, or V-TECS criteria
   d. List critical job aptitudes, behaviors, interests, and temperaments (for ideas see DOT)
   e. Review current work samples to determine unassessed critical requirements
   f. List factors to be assessed by work sample

3. Construct work sample

   a. Determine tasks to be performed by student from list of factors to be assessed
   b. Group tasks into job duties
   c. Develop work sample procedure requiring performance of all duties
   d. Construct work sample according to cost/durability criteria

4. Write preliminary manual

   a. State instructions to client
   b. State timing, counting, quality check, and observational procedures for evaluator
   c. Provide forms for recording client performance and behavior

5. Conduct field trial of work sample

   a. Administer work sample to small number of clients
   b. Record detailed performance and behavioral data on all clients
   c. Interview clients and evaluators to obtain reactions and suggestions about work sample

6. Modify work sample

   a. Analyze recorded and interview data
   b. Determine necessary modifications in instructions, procedures, and recording forms
   c. Make necessary modifications

7. Standardize work sample

   a. Standardize work sample instructions allowing for handedness, disabilities, and other individual differences as indicated by field trials
   b. Administer work sample (atleast two trials) to minimum of 30 clients and to other groups, if necessary
   c. Determine norm and percentile distribution for student or other groups
   d. Determine reliability of work sample (do students produce similar results on two separate administrations?)
   e. Determine content validity of work sample by having workers note whether work sample tasks represent work task of the field

8. Write work sample manual

   a. Specify use of work sample
   b. Specify necessary administration preparation and lay-out for administration
   c. Specify detailed instructions to the student, including modifications for handedness, disability, or other problems
   d. Specify observational procedures to be followed by evaluator, including listing of factors assessed
   e. Specify scoring procedures including timing, counting, and quality checks
   f. Report obtained statistical data including norms, reliability, validities

* Compiled by Malcolm Flanagan, sources unknown.

Figure 9.1

	Advantages	Disadvantages
Commerical Work samples	Realistic simulation of actual jobs	Expensive
	Systematic administration and scoring	Not always representative of local vocational programs or job market
	Normed	
	Readily available	Norms may not be appropriate to all populations
	Detailed instructions	
	Inexpensive	
Locally developed work samples	Representative of local vocational programs	Takes a lot of time for initial development
	Easy to administer	
		Local norms are time-consuming and expensive to develop

Vocational Program and Job Try-Outs

The most valid method of assessment is the actual placement of the student in the vocational class or on-the-job to see how he/she performs. Major pitfalls also exist in that the student needs a successful experience rather than a failing experience. Suggestions include: visiting vocational classrooms to observe skills performed, on-the-job placement with a job coach or assessment specialist who can teach and even perform some of the duties, and careful screening of on-the-job placements to ensure success. Obtaining vocational classroom visitations and on-the-job try-outs are time-consuming tasks but both offer reality testing and should be used whenever possible.

Conclusion

Vocational assessment, now mandated by law for special education and disadvantaged students who require assistance to succeed in vocational programming, is the last step in the career assessment process. Both formal and informal instruments may be used in the form of tests, inventories, job/task analysis, observation and rating of behavior, interviews, work samples, and vocational program and job try-outs. No one method is appropriate when used alone. Combining the methods provides an excellent basis for understanding the student.

References

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Vocational assessment of students with special needs: An implementation manual (1982). Austin: East Texas State University, Occupational Curriculum Laboratory.

CHAPTER 10.
REVIEW OF INSTRUMENTS BY PURPOSE

This chapter contains a brief review of specific instruments grouped according to the function served by the instrument. Each function may be represented by any combination of types of instruments such as tests, inventories, rating scales, and work samples. These functions are:

Achievement - the measurement of knowledge and skills mastered.

Aptitude - the measurement of specific learning abilities such as academic or mechanical aptitude.

Career Development - the measurement of life knowledge, skills and maturity.

Intelligence - the measurement of general ability such as to learn or adapt to one's environment.

Interest - the measurement of one's preference.

Learning Styles - the measurement of how a learner learns.

Adaptive Behavior Rating Scales - the measurement of adjustment to one's environment as determined by an observer.

Study Skills - the measurement of how a student attends to academic tasks.

Work Assessment - the measurement of industrially oriented job tasks.

Review of the instruments for each function will follow the general description of that function.

Achievement

Achievement tests measure the extent to which a person has "achieved", or learned something, usually as a result of planned instruction or training. McLoughlin and Lewis (1981) refer to achievement as school performance. Standardized tests in this area usually result in a grade-level score or age range score for functioning levels in reading, math, and language/communication skills. Criterion-referenced instruments reflect the student's strengths and weaknesses rather than an overall score.

The most current literature on testing achievement deals with Curriculum-Based Assessment. In this type of assessment, "the essential measure of success in education is the student's progress in the curriculum of the local school" (Tucker, 1985). The assessment of the student is based upon his/her ability to achieve in the classes into which he/she is placed. The materials used to assess progress are taken from the course of study the student is involved in, and areas of deficiency can be pinpointed relative to the course and instructional strategies developed to improve the deficient areas. These areas are covered in the IEP and the rate at which the goals are met can help determine whether or not adjustments need to be made in the course of study or the student's placement. Curriculum-Based Assessment does not exclude standardization as local norm data can be collected and used for comparison. This assessment model also assumes a systematic curriculum wherein objectives are identified and are measurable.

A simpler model of Curriculum-Based Assessment is ongoing in every school in relation to quizzes, unit tests, and semester exams. Teachers know how their students are performing, and are involved in "informal" assessment daily. They know if the student has difficulty with reading materials, math, spoken or written communication skills. Documenting this knowledge could be part of a systematic development of Curriculum-Based Assessment through group or individual, teacher developed, informal reading surveys, math tests or communication assessments.

All information regarding a student's achievement levels are important in relation to decision making about appropriate program placement. Providing answers to questions regarding a student's skills is the essence of achievement testing. Utmost care must be taken to chose the most appropriate assessment devices to give the team the best information upon which to base its decisions for the future plans of the student.

For the reader's convenience in locating instruments, the achievement instruments have been divided into subgroups. The subgroup labelled general contains instruments that assess multiple areas and the remaining subgroups include instruments that assess either one area or a specialized area.

ADULT BASIC LEARNING EXAMINATION (ABLE)

Target Population: Mentally retarded, learning disabled, and individuals with less than an eighth grade formal education.

Norm Groups: Developed and normed on 1,000 students (grades 2-7). Supplemental norms include a prison population and Adult Basic Education students.

Purpose of Instrument: To measure the level of educational achievement among adults.

Title of Subcomponents: Vocabulary, Reading, Spelling, Computation, Problem Solving, and Total.

Types of Scores: Levels I and II grade scores, Level III percentile ranks and stanines.

Scoring Information: May be hand or computer scored. Hand scoring takes approximately 30 minutes.

Validity: .50's to .60's.

Reliability: Split-half reliability on subjects at all levels ranged from .60 to .96.

Copyright: 1967, 1970, 1974 **Date of Most Recent Manual:** Not given.

Publisher: The Psychological Corporation.

Comments: The ABLE has three levels. Level I assesses the achievement of adults from first grade to fourth; Level II, fifth to eighth; Level III, ninth to twelfth. The ABLE can be used to determine the achievement of adults lacking formal education. The ABLE should be seriously considered for basic literacy assessment. Takes about 150 minutes to administer.

Source of Information: Botterbusch, K. & Michael, N. (1985)

BOEHM TEST OF BASIC CONCEPTS - REVISED

Ann E. Boehm

Target Population: Grades K-12.

Norm Groups: K-2 students in 16 cities across the United States.

Purpose of Instrument: Measure children's mastery of basic concepts used in school instruction (screening level).

Title of Subcomponents: Quantity, Space, and Time.

Types of Scores: Percentiles.

Scoring Information: Hand scoring with key.

Validity: Established as adequate by researchers after test was published.

Reliability: .81-.90 for Form A and Form B; Split half scores are considerably lower.

Copyright: 1967, 1970, 1971, 1986 **Date of Most Recent Manual:** 1986

Publisher: Psychological Corporation.

Comments: Individually or group administered in about 30 minutes. A pre-school version exists for ages 3-5. Translated into/adapted for Navajo, tactile form for the blind, prekindergarten and disadvantaged.

Source of Information: Dole, Janice A. in Keyser, D. & Sweetland, R., V. 1., (1984).

THE BRIGANCE DIAGNOSTIC INVENTORY OF BASIC SKILLS

Target Population: Grades K-9.
Norm Groups: Criterion-Referenced Test
Purpose of Instrument: Test 203 skill areas for readiness.
Title of Subcomponents: Reading, Listening, Research, Study Skills, Spelling, Language and Math.
Types of Scores: Number correct.
Scoring Information: Hand scoring.
Validity: Cross-referenced with recent tests.
Reliability: Not available.
Copyright: 1983 **Date of Most Recent Manual:** 1983
Publisher: Curriculum Associates, Inc.
Comments: Individually administered.
Source of Information: Test manual.

BRIGANCE INVENTORY OF ESSENTIAL SKILLS

Target Population: Mildly mentally retarded.
Norm Groups: Criterion-referenced rather than normed.
Purpose of Instrument: To assess secondary special needs students in all areas including role as a citizen, consumer, worker and family member.
Title of Subcomponents: 24 essential skill areas such as Word Recognition, Writing, Spelling, Number Facts, Metrics, Health and Attitude, Responsibility and Self-Discipline, Job Interview Preparation, Auto Safety and Communication.
Types of Scores: Text referenced to grade level of test materials.
Scoring Information: Hand scored.
Validity: Criterion referenced.
Reliability: Criterion referenced.
Copyright: 1981 **Date of Most Recent Manual:** 1981
Publisher: Curriculum Associates.
Comments: Time: not given. Brolin cites cross-reference of his LCCE competencies with this scale. See Brolin, D., pp. 403-409.
Source of Information: Curriculum Associates catalog and sales office.

KAUFMAN TEST OF EDUCATIONAL ACHIEVEMENT (KTEA)

Alan and Nadeen Kaufman

Target Population: Grades 1-12.

Norm Groups: Provides norms 6.0 to 18.11 as well as grade norms for 1,409 students from 15 states.

Purpose of Instrument: To measure school achievement.

Title of Subcomponents: Reading, Computation, Mathematics Application, and Spelling.

Types of Scores: Standard scores raw scores.

Scoring Information: Bands of error and percentile ranks.

Validity: Evidence of construct validity compared with WRAT, PIAT, KABC, and Stanford Achievement Test.

Reliability: .93.

Copyright: 1985 **Date of Most Recent Manual:** 1985

Publisher: American Guidance Service, Inc.

Comments: Individually administered; developed by two people with a long history of work in intelligence testing.

Source of Information: Sampler Manual.

METROPOLITAN ACHIEVEMENT TEST, SIXTH EDITION - SURVEY BATTERY

G. Prescott, I. Balow, T. Hogan, and R. Farr

Target Population: K.0-12.9.

Norm Groups: National (spring and summer) norms are available.

Purpose of Instrument: Assess accomplishment in school subjects.

Title of Subcomponents: Reading, Mathematics, Language, Science and Social Science.

Types of Scores: Full range.

Scoring Information: Hand or scoring service.

Validity: Good correlation with Otis Lennon (intelligence) Mental Abilities Test.

Reliability: Median correlations above .90 on earlier edition.

Copyright: 1985 **Date of Most Recent Manual:** 1985

Publisher: Psychological Corporation.

Comments: Group administered - time varies per level from 102-269 minutes. Three diagnostic batteries complete the Survey Battery and are criterion-referenced as well as having norm-referenced scores. Provides instructional reading level, achievement/ability comparison, and writing test.

Source of Information: Psychological Corporation catalog; MMY9:699.

PEABODY INDIVIDUAL ACHIEVEMENT TEST (PIAT)

Target Population: Grades K-12, general, cerebral palsy, and psychiatric populations.

Norm Groups: 200 boys or girls in each grade (K-12), a total of 3,000 students.

Purpose of Instrument: To provide a wide-range screening measurement of achievement.

Title of Subcomponents: Mathematics, Reading Recognition, Reading Comprehension, Spelling, and General Information.

Types of Scores: Grade scores, percentile ranks, age scores, and standard scores.

Scoring Information: The number of correct items between basal and ceiling are hand scored as the test is administered. Scoring takes about 15 minutes to plot.

Validity: Content and concurrent validity reported as good.

Reliability: Test-retest ranged from .42 to .94, intercorrelation ranged from .22 to .89.

Copyright: 1970. **Date of Most Recent Manual:** 1970.

Publisher: American Guidance Service.

Comments: Test takes an average of 40 minutes to give.

Source of Information: Botterbusch, K. & Michael, N. (1985).

STANFORD ACHIEVEMENT TEST SERIES

Target Population: Grade 1.5 - 9.5

Norm Groups: Norm and objective referenced.

Purpose of Instrument: To test skill and academic content areas by grade level.

Title of Subcomponents: Reading and Subcomponents, Math and Subcomponents, and Listening.

Types of Scores: Stanines, grade equivalent, percentiles, age and standard scores by domain.

Scoring Information: Clear and comprehensive manual. Machine scoring available with many options.

Validity: Good.

Reliability: .65 to .97.

Copyright: 1982-84 **Date of Most Recent Manual:** 1984

Publisher: Psychological Corporation.

Comments: Special edition for blind and deaf. New interpretive materials available in 1986. Takes time to administer, 190-320 minutes, but each subtest varies in time required.

Source of Information: Dunn, et al; (1984); Psychological Corporation catalog.

STANFORD EARLY ACHIEVEMENT TEST, SECOND EDITION

Richard Madden, Eric Gardner, and Cathy Collins

Target Population: Grades K-1.5.

Norm Groups: National norms.

Purpose of Instrument: Assess the child's cognitive abilities upon entrance to kindergarten, at end of kindergarten or entrance to first grade.

Title of Subcomponents: Environment, Mathematics, Sounds and Letters, Word Reading, Listening to Words and Stories.

Types of Scores: Scaled scores, national and local percentile ranks, grade equivalents.

Scoring Information: Hand or machine scored.

Validity: .53 to .90.

Reliability: .76 to .85.

Copyright: 1982-84 **Date of Most Recent Manual:** Not given.

Publisher: Psychological Corporation.

Comments: Administration: 2 hours and 35 minutes.

Source of Information: 8MMY; Psychological Corporation catalog.

USES BASIC OCCUPATIONAL LITERACY TEST (BOLT)

Target Population: Grades 1-11 level disadvantaged adults.

Norm Groups: Applicants for work, students in adult classes, and prison inmates; 60% were unemployed; mean schooling was 9 years.

Purpose of Instrument: Assess basic reading and mathematics skills of school dropouts.

Title of Subcomponents: Reading Vocabulary, Reading Comprehension, Arithmetic Computation, Arithmetic Reasoning.

Types of Scores: Scores converted to General Education Development Levels of the DOT.

Scoring Information: Not available but appears to be hand or machine scored.

Validity: Not established as of 1974.

Reliability: .61-.82.

Copyright: 1974 **Date of Most Recent Manual:** Not given.

Publisher: U. S. Government Printing Office.

Comments: Reviewers point out that the BOLT fills a need but that the psychometric properties were poor at the time of release.

Source of Information: MMY8:489

WIDE RANGE ACHIEVEMENT TEST - REVISED (WRAT-R) - LEVEL 2

Target Population: Persons ages 12 and above for Level 2.

Norm Groups: Based on age normed data. Data were collected using a stratified national sample. Data from this sample were gathered from 1981-1984. Norm tables were extended to age 74.

Purpose of Instrument: Designed to measure the codes which are needed to learn the basic skills of reading, spelling, and arithmetic.

Title of Subcomponents: Reading, Spelling, and Arithmetic.

Types of Scores: Raw scores, standard scores, grade equivalents, and percentile ranks are obtained.

Scoring Information: The experienced scorer can hand score in ten minutes. Points for each pre-subtest must be added to all three subtests for scoring.

Validity: Concurrent validity studies were in the .60's, .70's, and .80's.

Reliability: .90 for Reading, .89 for Spelling, and .79 for Arithmetic.

Copyright: 1984 **Date of Most Recent Manual:** 1984

Publisher: Jastak Associates, Inc.

Comments: Time: Short. The WRAT-R is a good prediction instrument to use with individuals considering entering school or getting their GED. Age norms are useful with the "out of school" adult population. Large print test form available.

Source of Information: Botterbusch, K., & Michael, N. (1985).

KEY MATH DIAGNOSTIC ARITHMETIC TEST

Target Population: Grades 1-9.
Norm Groups: 1,000 students in eight states, K-7; sample resembled U.S. population.
Purpose of Instrument: Provide a diagnostic assessment in mathematics.
Title of Subcomponents: 14 subtests in three areas - Content, Operations, and Applications.
Types of Scores: Raw scores and grade equivalent scores.
Scoring Information: Grade-referenced rather than norm-referenced.
Validity: Adequate according to the manual.
Reliability: Median reliability = .96.
Copyright: 1971 **Date of Most Recent Manual:** 1976
Publisher: American Guidance Services, Inc.
Comments: Administration: 30 minutes.
Source of Information: Key Math Manual.

STANFORD DIAGNOSTIC MATH TEST

Target Population: Grades 2-12.
Norm Groups: National norms of 35,000 students grades 2-12.
Purpose of Instrument: Test several mathematical skills.
Title of Subcomponents: Number System Numeration, Computation, Applications.
Types of Scores: Stanine scores and stanine ranges.
Scoring Information: Hand or machine scored.
Validity: .89-.92
Reliability: .94-.97
Copyright: 1976, 1978, 1984 **Date of Most Recent Manual:** 1984
Publisher: Psychological Corporation.
Comments: The SDMT is norm-referenced with good standardization; taps different mathematics skills and includes objectives in areas of math weaknesses. It is also criterion-referenced. Group test.
Source of Information: McLoughlin, J. & Lewis, R. (1981).

TESTS OF EARLY MATHEMATICS ABILITY

Herbert Ginsburg and Arthur Baroody

Target Population: Ages 4-8.
Norm Groups: 617 children in 12 states.
Purpose of Instrument: Measure formal and informal mathematics knowledge.
Title of Subcomponents: Not applicable.
Types of Scores: Math quotients, math ages, and percentiles.
Scoring Information: Hand scored.
Validity: .40 and .59 with Diagnostic Achievement Battery and .66 with Slosson Intelligence Test.
Reliability: .86-.94.
Copyright: 1983 **Date of Most Recent Manual:** 1983
Publisher: CTB/McGraw Hill.
Comments: Individually administered in about 20 minutes.
Source of Information: Lindeman, D. in MMY9:1252.

TESTS OF MATHEMATICS ABILITIES (TOMA)

Virginia Brown and Elizabeth McEntire

Target Population: Grades 3-12.
Norm Groups: 1,560 students representing a national sample.
Purpose of Instrument: Provide standardized information about a student's abilities.
Title of Subcomponents: Story Problems, Computation, General Information, Attitude Toward Math, Math Vocabulary.
Types of Scores: Standard scores, percentiles, and math quotients.
Scoring Information: Not available.
Validity: Correlates highly with general ability measures.
Reliability: Most are .70-.89.
Copyright: 1984 **Date of Most Recent Manual:** 1984
Publisher: CTB/McGraw Hill.
Comments: Individually administered, at least partially.
Source of Information: MMY9:1263.

DIAGNOSTIC READING SCALES

George Spache

Target Population: Grades 1.0-8.5

Norm Groups: 2,000 rural and urban students from four states with a minimum of 100 at each grade level.

Purpose of Instrument: Test reading strengths and weaknesses.

Title of Subcomponents: Consonant Sounds, Vowel Sounds, Consonant Blends, Common Syllables or Phonograms, Blending, Letter Sounds, Initial Consonant Substitution, Auditory Discrimination.

Types of Scores: Grade scores/grade equivalent.

Scoring Information: Hand scoring.

Validity: Adequate.

Reliability: .80's to .90's.

Copyright: 1972, 1981 **Date of Most Recent Manual:** 1981

Publisher: CTB/McGraw Hill.

Comments: Samples several areas of reading. Individually administered.

Source of Information: McLoughlin, J. & Lewis, R. (1981).

SECONDARY LEVEL ENGLISH PROFICIENCY TEST

Target Population: Grades 7-12.

Norm Groups: 1,200 non-native public school students.

Purpose of Instrument: Assess the understanding of spoken and written English as a second language.

Title of Subcomponents: Listening Comprehension, Reading Comprehension.

Types of Scores: Percentiles, scaled scores.

Scoring Information: Hand scored.

Validity: Moderate validity established.

Reliability: .93-.96 internal consistency.

Copyright: 1980, 1984 **Date of Most Recent Manual:** 1984

Publisher: CTB/McGraw Hill.

Comments: Administration - Group. Requires 90 minutes (2 forty-five minute periods). Has 2 forms.

Source of Information: CTB/McGraw Hill catalog, MMY9:1090.

SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS III LISTENING SKILLS

Target Population: Pre-K through 12.9.

Norm Groups: Stratified national sampling.

Purpose of Instrument: Measure skills in comprehending, interpreting and recalling oral language, (optional: Study Skills, Assessment).

Title of Subcomponents: Not applicable. Listening Skills in part of the Step III Battery.

Types of Scores: Percentile ranks, stanines, standard scores, grade level indicators, and normal curve equivalents.

Scoring Information: Hand or machine scored.

Validity: Correlates .70-.80 with aptitude (SCAT).

Reliability: .60-.80 for most Step III subtests.

Copyright: 1976, 1979 **Date of Most Recent Manual:** 1979

Publisher: Educational Testing Service.

Comments: Administration - individual or group in approximately 20 minutes.

Source of Information: Keyser, D., & Sweetland, R., V. 1, (1984).

STANFORD DIAGNOSTIC READING TEST

Target Population: Grades 1.5-3.5, 2.5-5.5, 4.5-9.5, 9-13

Norm Groups: Six communities with family income and years of school, etc. taken into consideration.

Purpose: Measure comprehension and vocabulary, word recognition and rate of reading.

Titles of Subcomponents: Comprehension, Vocabulary, Auditory Discrimination, Syllabication, Beginning and ending sounds, Blending, Sound Discrimination.

Types of Scores: Stanine and percentile.

Scoring Information: Hand or machine.

Validity: Good.

Reliability: .94 and .93 for grades 3 and 4; .87-.91 for grades 5-8.

Copyright: 1966 **Date of Most Recent Manual:** not available.

Publisher: Harcourt Brace Javanovich Inc.

Comments: Group test; also criterion referenced test.

Source of Information: 7MMY.

TEST OF EARLY READING ABILITY

D. Kim Reid, Wayne P. Hresko, and Donald D. Hammill

Target Population: Preschool through primary students.

Norm Groups: National sample of 1,184 children with norms at six month intervals from age 3.0-7.11.

Purpose of Instrument: Measure reading ability, not readiness, of preschool through primary school level students.

Title of Subcomponents: Knowledge of Alphabet, Comprehension, and the Conventions of Reading.

Types of Scores: Scaled scores, percentiles, age equivalents.

Scoring Information: Hand scored.

Validity: Correlated with other tests and discriminated beyond the .01 level of confidence.

Reliability: .92-.97 test-retest over a two week period.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: PRO-ED.

Comments: Administration - individual. Standardized on same sample as the Test of Early Language Development.

Source of Information: PRO-ED catalog; MMY9:1253.

TEST OF READING COMPREHENSION (TORC)

Virginia L. Brown, Donald D. Hammill, and J. Lee Wiederholt

Target Population: Grades 1-8.

Norm Groups: 3,500 students from 10 states, ages 6-17 (grades 1-8).

Purpose of Instrument: Determine reading and written language comprehension in relation to norm group.

Title of Subcomponents: General Vocabulary, Syntactic Similarities, Paragraph Reading, Sentence Sequencing, Math Vocabulary, Social Studies Vocabulary, Science Vocabulary, Reading Directions of School Work.

Types of Scores: Grade equivalent and scaled scores.

Scoring Information: Hand scored.

Validity: Supported.

Reliability: .80+.

Copyright: 1978 **Date of Most Recent Manual:** 1984

Publisher: Services for Professional Educators, Pro-Ed.

Comments: Individually administered.

Source of Information: McLoughlin, J. & Lewis, R. (1981); TORC Manual.

TEST OF WRITTEN SPELLING

Stephen C. Larsen and Donald D. Hammill

Target Population: Regular and special students grades 1-12.
Norm Groups: 4,000
Purpose of Instrument: Assess ability to spell.
Title of Subcomponents: Predictable Words, Spelling Demons, and Combined Sets of Words.
Types of Scores: Spelling Quotient and Percentile Ranks.
Scoring Information: Hand scored.
Validity: .50 median correlations for subtests.
Reliability: .80 or higher.
Copyright: 1978 **Date of Most Recent Manual:** 1985
Publisher: PRO-ED.
Comments: Administered to groups in 20-40 minutes.
Source of Information: Catalog and manual.

WOODCOCK-JOHNSON PSYCHO-EDUCATION BATTERY

Target Population: Ages 3 to adult - wide age range.
Norm Groups: 4,732 subjects in 49 communities. Sex, race, region, etc., are all included.
Purpose of Instrument: Measure cognitive ability, scholastic aptitude, achievement, and interests.
Title of Subcomponents: Part I - 12 cognitive ability subtests; Part II - 10 subtests that measure achievement; Part III - 5 subtests that measure level of preference for scholastic and nonscholastic activities.
Types of Scores: Grade and age equivalent scores, percentile ranks.
Scoring Information: Hand scored.
Validity: Evidence supports this test.
Reliability: Evidence supports this test.
Copyright: 1978 **Date of Most Recent Manual:** 1978
Publisher: DLM Teaching Resources.
Comments: Some information on LD, TMR, BD populations. Individually administered.
Source of Information: Woodcock-Johnson Manual.

WOODCOCK READING MASTERY TESTS

Target Population: Grades K through 12.

Norm Groups: Data collected in 1971 and 1972 on a stratified random sample of U. S. males and females in grades 7-12 with social-economic status factors considered.

Purpose of Instrument: To measure precise reading achievement.

Title of Subcomponents: Letter Identification, Word Identification, Word Attack, Word Comprehension, and Passage Comprehension.

Types of Scores: Raw scores may be converted to grade scores, age scores, percentile ranks, and standard scores.

Scoring Information: Student grade placement must be known to nearest tenth of the year. Hand or machine scored.

Validity: Content validity, intercorrelation data, and predictive data suggest a valid instrument.

Reliability: Split half, test-retest, alternate form reliability is high.

Copyright: 1973. **Date of Most Recent Manual:** 1973.

Publisher: American Guidance Service.

Comments: Total familiarity with the test including the administration, scoring and interpretation is recommended prior to using. Administration time 30 to 45 minutes. Microcomputer programs available for instant score conversions.

Source of Information: Botterbusch, K. & Michael, N. (1985).

ASSESSMENT OF CHILDREN'S LANGUAGE COMPREHENSION

Rochana Foster, Jane J. Giddan, and Joel Stark

Target Population: 3-6.5 years.

Norm Groups: Essentially a criterion-referenced instrument.

Purpose of Instrument: Define receptive language difficulties and indicate correction of language disorders.

Title of Subcomponents: Not applicable.

Types of Scores: Raw scores.

Scoring Information: Hand scored.

Validity: Criterion referenced.

Reliability: Criterion referenced.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Consulting Psychologists Press, Inc.

Comments: Individually administered in 10-15 minutes. Spanish version is available. This instrument appears to be highly similar to the Peabody Picture Vocabulary Test Revised in its format and administration.

Source of Information: Sweetland, R. & Keyser, D. (1983).

ASSESSMENT OF FLUENCY IN SCHOOL-AGE CHILDREN

Julia Thompson

Target Population: Ages 3-18, Grades K-12.

Norm Groups: Criterion-referenced.

Purpose of Instrument: Assess disfluent speech (stuttering) and prescribe treatment.

Title of Subcomponents: Expressive Language, Physiological Components and Self-awareness of Disfluencies.

Types of Scores: Not available.

Scoring Information: Examiner scored.

Validity: Criterion referenced.

Reliability: Criterion referenced.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: CTB/McGraw Hill (also: The Interstate Printers & Publishers, Inc.)

Comments: Administration - Individually by a speech therapist in approximately 45 minutes plus 1 hour for observation.

Source of Information: Sweetland, R. & Keyser, D. (1983).

CARROW ELICITED LANGUAGE INVENTORY

Elizabeth Carrow

Target Population: Ages 3 to 7.11 years of age.

Norm Groups: White middle class children with standard American speech. Children with speech defects were eliminated.

Purpose of Instrument: Measure a child's productive control of grammar.

Title of Subcomponents: 52 stimuli including 51 sentences and one phrase ranging in length from 2-10 words.

Types of Scores: Mean scores for age groups. Percentile ranks compared to norm group. Standard scores; stanine scores.

Scoring Information: Hand scored.

Validity: Some evidence exists; manual indicates validity.

Reliability: .98 and .99.

Copyright: 1974 **Date of Most Recent Manual:** 1976

Publisher: Learning Concepts.

Comments: Individually administered.

Source of Information: Carrow manual.

CLINICAL EVALUATION OF LANGUAGE FUNCTION (CELF)

E. Semel and E. Wiig

Target Population: Grades K-12.

Norm Groups: 1,378 students from a representative sample of United States stratified for race, sex, and geographic regions.

Purpose of Instrument: Assist in identifying the nature and degree of language disabilities in school age children.

Title of Subcomponents: Phonology, Syntax, Semantics, Memory and Word Finding, and Retrieval.

Types of Scores: Raw scores, language age norms comparisons, percentile rank norm comparisons.

Scoring Information: Hand scoring.

Validity: Evidence supports validity.

Reliability: .90+.

Copyright: 1980 **Date of Most Recent Manual:** 1980

Publisher: Merrill Publishing Company.

Comments: Individually administered.

Source of Information: Test manual.

GOLDMAN-FRISTOE TEST OF AUDITORY DISCRIMINATION

Target Population: Age 4 through adult.

Norm Groups: 1,490 subjects from Minnesota, New Jersey, and Tennessee.

Purpose of Instrument: Measure speech-sound discrimination.

Title of Subcomponents: Training Procedure, Quiet Subtest, Noise Subtest.

Types of Scores: Percentile Rank and Standard Scores.

Scoring Information: Hand scored.

Validity: .32 to .76. Clinical samples have higher coefficient than standardization group.

Reliability: Internal consistency by age mostly in the .80's; Test-retest .81-.87.

Copyright: 1970 **Date of Most Recent Manual:** 1970

Publisher: American Guidance Services, Inc.

Comments: Administration time: 7-8 minutes plus training procedure time. Individually administered.

Source of Information: Test manual.

GOLDMAN-FRISTOE-WOODCOCK TEST OF AUDITORY DISCRIMINATION

Target Population: Ages 5 - adult.

Norm Groups: Male and female ages 3-84 from Minnesota, New Jersey, and Tennessee.

Purpose of Instrument: Screen student's ability to distinguish between speech sounds (auditory discrimination).

Titles of Subcomponents: Quiet and Noise Discrimination.

Types of Scores: Percentile ranks by age.

Scoring Information: Hand scoring by administrator.

Validity: .68 Quiet Subtest and .72 Noise Subtest with expert judgments.

Reliability: Split half .79 for Quiet Subtest and .68 for Noise Subtest.

Copyright: 1970 **Date of Most Recent Manual:** Not given.

Publisher: American Guidance Services.

Comments: Requires 15-30 minutes to give.

Source of Information: McLoughlin, J. A. & Lewis, R. B. (1981).

GOLDMAN-FRISTOE TEST OF ARTICULATION

Target Population: School age students.
Norm Groups: Appears to be part of a stratified national sample of 38,884 children.
Purpose of Instrument: Identify articulation errors of consonant sounds.
Title of Subcomponents: Sounds-in-Words, Sounds-in-Sentences, and Stimulability Subtest.
Types of Scores: Percentiles.
Scoring Information: Number of errors.
Validity: Not available.
Reliability: Test-retest: 86-95 percent agreement; Inter-Rater: 88-92 percent agreement.
Copyright: 1969, 1972 **Date of Most Recent Manual:** 1972
Publisher: American Guidance Services.
Comments: Individually administered.
Source of Information: Manual.

GOLDMAN-FRISTOE-WOODCOCK AUDITORY SKILLS TEST BATTERY

Target Population: Ages 3-8.
Norm Groups: 512 subjects from four states (some subtests have a larger norm size).
Purpose of Instrument: Assess wide range of auditory skills.
Title of Subcomponents: Selective Attention, Diagnostic Discrimination, Recognition Memory, Memory for Content, Memory for Sequence, Sound Mimicry, Sound Recognition, Sound Analysis, Sound Blending, Sound-Symbol Association, Reading of Symbols, Spelling of Sounds.
Types of Scores: Age equivalent scores and percentile ranks.
Scoring Information: Examiner scored.
Validity: Correlation with age .44-.81 on most scales.
Reliability: .73-.99 internal consistency.
Copyright: 1976 **Date of Most Recent Manual:** 1976
Publisher: American Guidance Service, Inc.
Comments: Individually administered.
Source of Information: Manual.

PEABODY PICTURE VOCABULARY TEST-REVISED (PPVT-R)

Loyd M. and Leota M. Dunn

Target Population: Age 2.5 to adult.

Norm Groups: National sample of 4,200 children and youth and 828 adults.

Purpose of Instrument: Measure receptive (hearing) vocabulary for Standard American English and quick estimate of verbal ability.

Title of Subcomponents: Not applicable.

Types of Scores: Standard scores, percentile ranks, stanines and age equivalents.

Scoring Information: Hand scored.

Validity: Correlates highly with vocabulary measures, moderately with verbal intelligence, and reasonably with school achievement measures.

Reliability: Split half: .61-.88; Test-retest: .78-.82.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: American Guidance Services, Inc.

Comments: Individually administered in 10-20 minutes. Technical Supplement provides details about research and norming data.

Source of Information: Manual.

REVISED TOKEN TEST

Malcolm M. McNeil and Thomas E. Prescott

Target Population: Adults ages 20-80.

Norm Groups: 90 normals, 30 left hemisphere (aphasic) patients, and 30 right hemisphere (nonaphasic) patients.

Purpose: Assess auditory disorders associated with brain damage and aphasia.

Titles of Subcomponents: Normal, Right and Left Hemisphere Brain Damage.

Types of Scores: Percentile ranks.

Scoring Information: Examiner scored.

Validity: Minimal validity data.

Reliability: .90 - .99.

Copyright: 1978. **Date of Most Recent Manual:** 1978.

Publisher: PRO-ED.

Comments: Individual administration. Revision of the Token Test by DeRenzi and Vignoli.

Source of Information: MMY 9:1048.

SEQUENCED INVENTORY OF COMMUNICATION DEVELOPMENT REVISED

Dona L. Hedrick, Elizabeth M. Prather, & Annette R. Tobin

Target Population: 4 months to 4 years functional communication level.

Norm Groups: 252 caucasian children, 21 at each of 12 age levels between 4 and 48 months judged to be without communication developmental delays.

Purpose of Instrument: Assess communication development level and facilitate development of intervention plans.

Title of Subcomponents: Expressive and Receptive Scales.

Types of Scores: Expressive and Receptive Communication Age Scores.

Scoring Information: Examiner scored.

Validity: .75-.80 with various language tests.

Reliability: .90 or above.

Copyright: 1975, 1984 **Date of Most Recent Manual:** 1984

Publisher: University of Washington Press, P. O. Box C-50096, Seattle, WA 98145-0096.

Comments: Individually administered; Time: 30 minutes for infants and 75 minutes for children over 24 months.

Source of Information: Test manual.

TEST OF ADOLESCENT LANGUAGE (TOAL)

Donald D. Hammill, Virginia L. Brown, Stephen C. Larsen and J. Lee Wiederholt

Target Population: Age 11-18.5 (grades 6-12).

Norm Groups: 2,700 students from 17 states.

Purpose of Instrument: Assess spoken and written language repetition and expression.

Title of Subcomponents: Listening/Vocabulary, Listening/Grammar, Speaking/Vocabulary, Speech/Grammar, Reading/Vocabulary, Reading/Grammar, Writing/Vocabulary, Writing/Grammar.

Types of Scores: ALQ (Adolescent Language Quotient) total profile of composite scores.

Scoring Information: Standard scores.

Validity: Related to other measures - .59-.83.

Reliability: .80-.90.

Copyright: 1980 **Date of Most Recent Manual:** 1980

Publisher: Service for Professional Educators.

Comments: One of few tests which assesses language in adolescents; use with other assessment for instructional planning. 1-3 hours administration.

Source of Information: McLoughlin, J. & Lewis, R. (1981); TOAL Manual.

TEST FOR AUDITORY COMPREHENSION OF LANGUAGE - REVISED

Elizabeth Carrow-Woolfolk

Target Population: Pre-school and elementary age.

Norm Groups: 1,003 normal language children ages 3.0-9.11 from a stratified national sampling.

Purpose of Instrument: Assess auditory comprehension.

Title of Subcomponents: Word Classes and Relations, Grammatical Morphemes, Elaborated Sentences.

Types of Scores: Percentile ranks, age equivalent and standard scores.

Scoring Information: Hand scoring. Administration and scoring require special training.

Validity: Most correlations are in acceptable to high range.

Reliability: .89-.95 test-retest.

Copyright: 1972, 1985 **Date of Most Recent Manual:** 1985

Publisher: DLM Teaching Resources.

Comments: Individually administered in 5-20 minutes.

Source of Information: Manual.

TEST OF ARTICULATION PERFORMANCE - DIAGNOSTIC (TAP—D)

Brian R. Bryant and Deborah L. Bryant

Target Population: Ages 3-8.

Norm Groups: Not available.

Purpose of Instrument: Diagnose articulation errors.

Titles of Subcomponents: Isolated Words, Distinctive Features, Selective Deep Test, Continuous Speech, Stimulability, Verbal Communication Scales.

Types of Scores: Not available.

Scoring Information: Hand scored.

Validity: Not available.

Reliability: Not available.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: PRO-ED.

Comments: TAP-S, a parallel screening level instrument, is also available by these authors. Sufficient data are missing to warrant caution in using.

Source of Information: MMY 9:1244

TEST OF EARLY LANGUAGE DEVELOPMENT (TELD)

Wayne P. Hresko, D. Kim Reid, and Donald D. Hammill

Target Population: Ages 3 to 7.11.

Norm Groups: 1,184 children in eleven states and Canada. Sample stratified by race, sex, geographic area and occupation of parents.

Purpose of Instrument: Identify children who are behind peers in language, to document children's progress in language, research and instruction.

Title of Subcomponents: Expressive and Receptive Language Form and Content.

Types of Scores: Language quotient, percentiles, language age, scaled scores.

Scoring Information: Hand scored.

Validity: Evidence to support validity - content, construct, criterion.

Reliability: Test-retest exceeds .80 and internal consistency exceeds .90.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: Services for Professional Educators, Pro-Ed.

Comments: Administration: 15-20 minutes.

Source of Information: TELD Manual.

TEST OF LANGUAGE DEVELOPMENT (TOLD)

Target Population: Ages 4-8.11.

Norm Groups: 1,836 children 4-8.11 who speak "typical English". Varied geographical areas, socio-economic backgrounds, etc.

Purpose of Instrument: Assesses both reception and expression in oral language, phonology, syntax, and semantics.

Title of Subcomponents: Semantics (Picture Vocabulary and Oral Vocabulary), Syntax (Grammatic Understanding, Sentence Imitation, Grammatic Completion), Phonology (Word Descrimination and Word Articulation).

Types of Scores: Age norms. Standard scores and percentiles.

Scoring Information: Hand scored.

Validity: Strong evidence exists to support validity.

Reliability: Exceeds .80.

Copyright: 1977 **Date of Most Recent Manual:** 1982

Publisher: Pro-Ed.

Comments: Individually administered in 35-40 minutes. Students who are deaf or who do not speak English should not be given the TOLD.

Source of Information: Test manual.

TEST OF WRITTEN LANGUAGE (TOWL)

Donald D. Hammill and Stephen C. Larsen

Target Population: Students grades 2 to 12, ages 7 to 18-11.

Norm Groups: 3,418 students in 14 states. Stratified by sex and geographic region from 1980 Census data.

Purpose of Instrument: Measure written expression in subtest areas.

Title of Subcomponents: Six subtests - Vocabulary, Thematic Maturity, Spelling, Word Usage, Style, Handwriting.

Types of Scores: Grade and age equivalents, standard scores, percentile ranks.

Scoring Information: Hand scored. Raw scores in each area are converted to standard scores - WLQ Written Language Quotient.

Validity: Strong evidence supports validity.

Reliability: Four areas studied. Yield near .93 average.

Copyright: 1978 **Date of Most Recent Manual:** 1983

Publisher: Services for Professional Educators, Pro-Ed.

Comments:

Source of Information: TOWL Manual.

Adaptive Behavior Rating Scales

Social or interpersonal skills are key factors for persons in education, family relationships, group homes, recreation and employment. Inability to cope may be one reason a student is labelled mentally retarded, learning disabled, or behavior disordered. Foss, et al. (1984) report that the lack of appropriate interpersonal skills is the chief reason why handicapped workers have work problems.

Various types of instruments to assess behavior, including social skills, are listed together in this section. For the diagnosis of students with the handicapping condition of mental retardation, adaptive behavior scales must be used in conjunction with other testing. For the diagnosis of students with behavioral disorders, behavior assessment scales must be used. Other scales are needed to support achievement assessment for the learning disabled. Assessment specialists, teachers and counselors must be careful in choosing rating scales for disadvantaged students who come from a socially different background from the majority culture.

Assessing behavior is difficult in all contexts for many reasons including the frame of reference of the observer/rater, inability to see all that is happening, objectivity, and quality of behavioral rating scales. Yet some behaviors, such as habits, may be assessed more readily through observation than through any other means and, hence, is the most appropriate assessment process. Development of good observation skills require training, is time-consuming, and has limited observer bias (Makowski, no date).

Ratings

Ratings depend heavily upon the quality of observation of the person completing the rating and on the quality of the rating device. Reliability of a rating scale is affected by a number of factors: clarity of items, items written in behavioral rather than general terms, and clearly defined criteria of the behaviors. Some rules for recording behaviors, writing behavioral ratings and critiquing rating scales are:

1. Record specific behaviors rather than making an interpretation. For example, "Jane started her desk work before explanations were finished" rather than "Jane does not pay attention". The latter is not a behavior but is interpretation.

2. Complete a frequency count of behaviors, if possible. For example, "Mike interrupted his classmates 10 times in 15 minutes to ask for assistance" rather than "Mike constantly interrupts his classmates".

3. Use action words such as "read, wrote, laughed, kicked, completed" rather than "Mary is lazy".

4. Use only essential words such as "dropped pencil 15 times during task".

5. Write in present tense for behavior that is ongoing. For example, "Stays on tasks two minutes past stopping time".

6. Include conditions under which behavior occurs. For example, "talks to peers when teacher's back is turned".

7. Describe what happened, not what did not happen such as "comes five minutes late four times out of five" rather than "does not come to school on time" (Corthell and Lesnick, 1974).

Few older behavioral scales follow these rules. Because of this, the reliability of the scales is low. Rarely will two or more raters define vague terms in the same way. While it is difficult to develop or find quality rating scales, one should make the effort. Using inadequate scales often leads to poor assessment. The following example is one means to make ratings objective when the need exists to assess global concepts (Flanagan and Mertensmeyer, no date).

Quality of Work

( ) 60% or less of completed task is acceptable

( ) 75% of completed task is acceptable

( ) 90% of completed task is acceptable

( ) 95% or more of completed task is acceptable

( ) 99% or more of completed task is acceptable

Attitude

( ) Shows enthusiasm for less than 30% of tasks

( ) Shows enthusiasm for 30-49% of tasks

( ) Shows enthusiasm for 50-74% of tasks

( ) Shows enthusiasm for 75-89% of tasks

( ) Shows enthusiasm for at least 90% of the tasks

Memory of Instructions

( ) Remembers 2 step tasks less than 4 of 10 times

( ) Remembers 2 step tasks 4 to 6 of 10 times

( ) Remembers 2 step tasks 7 of 10 times

( ) Remembers 2 step tasks 8 of 10 times

( ) Remembers 2 step tasks 9 of 10 times

Adaptive behavior, a required component for the diagnosis of mental retardation in Missouri, is defined by Taylor (1985) as "ability to cope or deal effectively with personal and social demands" (p. 1). Common characteristics are age-specific and cultural or environmental specific behaviors. Thus, a student is rated in relationship to behaviors that are expected of his/her age and the culture or environment in which the behavior occurs. For example, the revised Vineland Social Maturity Scale (Vineland Adaptive Behavior Scales, 1984) items are arranged in chronological age by domains. Also, three versions are available but focus on different environments and may be used independently or together.

Because of the need for a comparative base, some of the adaptive behavior scale measures are norm-referenced. Hence, it is essential that the characteristics of the norm group be kept in mind when using adaptive behavior instruments. Adaptive behavior scales are either *descriptive* and used to make classification decisions such as attaching the label of mental retardation, or *prescriptive* and used to make instructional decisions such as pinpointing goals and objectives for daily living and social skills instruction. The *descriptive* instruments are usually normed on "normal" children while *prescriptive* instruments are often normed on handicapped children (Taylor, 1985).

Conclusion

Adaptive behavior scales provide important information for both describing special needs students and prescribing instruction for all aspects of career development, but especially for daily living and social skills. Instruments on the market today have been improved but must be used with caution and in conjunction with non-test data. The instruments that follow are broken into three subgroups: adaptive behavior, behavioral ratings, and learning disabled. Rating scales pertaining to employment may be found in the section labelled work assessment.

AAMD ADAPTIVE BEHAVIOR SCALE - SCHOOL EDITION

Lambert, N., Windmiller, M., Tharinger, D., & Cole, L.

Target Population: 3-16 year old mentally retarded.

Norm Groups: School-based population.

Purpose of Instrument: To describe adaptive behavior of students and plan instruction.

Title of Subcomponents: Independent Functioning, Physical Development, Economic Activity, Language Development, Numbers and Time, Prevocational Activity, Self-Direction, Responsibility, Socialization, etc.

Types of Scores: Comparisons with regular education, EMR population and TMR population. Percentile ranks.

Scoring Information: Observer rates 0-6, totals in domains, and converts to scores.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1981. **Date of Most Recent Manual:** 1981.

Publisher: American Association on Mental Deficiency.

Comments: The school edition is substantially different from older editions. Has both an administrative and Instructional Planning Manual and a Diagnostic and Technical Manual.

Source of Information: Taylor, R. (1985).

ABILITIES AND BEHAVIORS CHECKLIST

State Schools for Severely Handicapped
Missouri Department of Elementary and Secondary Education

Target Population: Multiply handicapped

Norm Groups: Not normed

Purpose of Instrument: To record abilities and behaviors.

Titles of Subcomponents: Sensory Motor, Self-Care, Language and Communication, Functional Academics, Practical Arts and Occupational Skills.

Types of Scores: Subcomponents and scoring categories.

Scoring Information: Teachers write data in appropriate column. Columns are: physically unable, acquisition, and maintenance.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1979 **Date of Most Recent Manual:** Not available

Publisher: MODESE, P. O. Box 480, Jefferson City, MO 65102.

Comments: Individually rated. Those marked under physically unable to do are not used in developing IEP.

Source of Information: Abilities and Behaviors Checklist Manual.

ADAPTIVE BEHAVIOR EVALUATION SCALE

Stephen B. McCarney

Target Population: Adaptive behavior of mild and moderately involved students.

Norm Groups: 2,059 nonhandicapped, BD, LD, and mild, moderate, and severely retarded students in 70 school districts of 18 states, ages 4.5 to 19 years.

Purpose of Instrument: Measure of adaptive behavior of students experiencing academic or behavioral difficulties.

Title of Subcomponents: Environmental/Interpersonal Behaviors, Self-Related Behaviors, Task-Related Behaviors.

Types of Scores: Standard scores for subscales plus Adaptive Behavior Quotient.

Scoring Information: Summarize ratings to obtain raw scores for each subscale and for total. Convert to standard scores through use of charts.

Validity: Total scale .65 with 1965 Vineland; Subscales differentiate regular from MR students.

Reliability: Subscale internal coefficients range from .88-.97; interrater reliabilities .97-.99.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Hawthorne Educational Services, P. O. Box 7553, Columbia, MO 65205.

Comments: Administration time: 15-20 minutes by educator. Thorough manual; good standardization procedures used.

Source of Information: Manual.

ADAPTIVE BEHAVIOR INVENTORY FOR CHILDREN (ABIC)

Jane R. Mercer and June F. Lewis

Target Population: 5-11 year old mentally retarded.

Norm Groups: Black, Hispanic and white children.

Purpose of Instrument: To assist in the declassification of minority children labelled as mentally retarded.

Title of Subcomponents: Family, Community, Peer Relations, Nonacademic School Roles, Earner/Consumer, and Self-Maintenance.

Types of Scores: Standard scores with mean of 50 and SD of 15.

Scoring Information: Hand scored.

Validity: Low correlation with achievement and intelligence test scores.

Reliability: Informal assessment.

Copyright: 1977-78 **Date of Most Recent Manual:** Not available.

Publisher: The Psychological Corporation.

Comments: Focuses on behaviors outside of school environment; 242 items used to interview parent; research indicates that it does reduce the number of minority students placed in mentally retarded programs.

Source of Information: Taylor, R. (1985).

CAIN-LEVINE SOCIAL COMPETENCY SCALE

Target Population: Trainable mentally retarded between ages 5 and 13 years, 11 months.

Norm Groups: 414 males and 302 females between ages 5-0 and 13-11 in public schools; age 8-0 and above are from California only.

Purpose of Instrument: Assess social competence in self-help, initiative, social skills, and communication.

Title of Subcomponents: Self-help, Initiative, Social Skills, and Communication.

Types of Scores: No information.

Scoring Information: Hand scored according to instructions.

Validity: .09-.30 with IQ and .40-.50 with chronological age.

Reliability: .55-.95 internal consistency; .90-.98 test-retest at three week interval.

Copyright: 1963 **Date of Most Recent Manual:** Not given.

Publisher: Consulting Psychology Press, Inc.

Comments: Parent or teacher observes and records behavior.

Source of Information: 8MMY.

CAMELOT BEHAVIORAL CHECKLIST

Ray. N. Foster

Target Population: Child, adolescent, adult mentally retarded.

Norm Groups: Mentally retarded.

Purpose of Instrument: "Evaluates adaptive behavior skills in mentally retarded persons. Use to plan and monitor educational programs for such individuals."

Title of Subcomponents: Self-Help, Physical Development, Home Duties, Vocational and Economic Behaviors, Independent Travel, Numerical and Communication Skills, and Social Behavior Responsibility.

Types of Scores: Percentiles.

Scoring Information: Hand scored in categories and 40 subcategories.

Validity: Significantly correlated with several adaptive behavior scales and intelligence tests in one study.

Reliability: "Limited use to the severely retarded."

Copyright: 1974. **Date of Most Recent Manual:** 1977.

Publisher: Camelot Behavioral Systems, P. O. Box 3447, Lawrence, KS 66044; (913) 843-9159.

Comments: Staff member rates student; useful as a guide for administrative and programming. Useful primarily with institutionalized students.

Source of Information: Sweetland, R. & Keyser, D. (1983); manual.

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COMPREHENSIVE TEST OF ADAPTIVE BEHAVIOR

G. Adams

Target Population: Preschool to adult.

Norm Groups: Not normed.

Purpose of Instrument: "Precise evaluation of adaptive abilities," indicates relative standing and helps in establishing scope and sequence of training.

Title of Subcomponents: Self-Help, Home Living, Independent Living, Social, Sensory Motor, Language Concepts and Academic Skills - 529 items in all.

Types of Scores: Profile and overall.

Scoring Information: Examiner observes, untimed, parent report, and formal testing.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: Not available. **Date of Most Recent Manual:** Not given.

Publisher: Charles E. Merrill

Comments: Has clearly identified criteria for passing each item rated. May be used for prescriptive purposes.

Source of Information: Sweetland, R., & Keyser, D. (1983); Taylor, R., (1983).

PIERS-HARRIS CHILDREN'S SELF-CONCEPT SCALE

Ellen V. Piers and Dale B. Harris

Target Population: Grades 4-12.

Norm Groups: 1,183 children in one school district in Pennsylvania.

Purpose of Instrument: General screening.

Title of Subcomponents: Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, Happiness and Satisfaction.

Types of Scores: Percentile, stanine and T scores.

Scoring Information: Hand scored but computerized scoring service and reports are available.

Validity: Factor analysis studies moderately support validity.

Reliability: .42-.96 test-retest and .88-.93 internal consistency.

Copyright: 1969, 1984 **Date of Most Recent Manual:** 1984

Publisher: Western Psychological Services.

Comments: Administered in 25-30 minutes; third grade reading level.

Source of Information: MMY9:960.

THE SCALES OF INDEPENDENT BEHAVIOR

R. Bruininks, R. Woodcock, R. Weatherman, and B. Hill

Target Population: Mild/Moderately retarded, infant-adults.

Norm Groups: Not mentioned.

Purpose of Instrument: To assess level of independent behavior.

Title of Subcomponents: Can use short form = 32 items, 15 subscales = 276 items. Fine Motor, Gross Motor, Soc-Interaction, Language Comprehension, Language Expression, Eating and Meal Preparation, Toileting, Dress, Personal Self-Care, Domestic Skills, Time, Money, Work, Home-Community Orientation.

Types of Scores: Standard Scores.

Scoring Information: Single, 15 subscales, maladaptive score, any combination of subscales score.

Validity: Structured interview - no validity studies found.

Reliability: Informal assessment.

Copyright: 1984. **Date of Most Recent Manual:** 1984.

Publisher: DLM Teaching Resources, Allen, TX.

Comments: Part of Woodcock-Johnson Psychoeducational Battery, but can be used separately. Descriptive, *not prescriptive*, and best for mild/moderate retarded individuals.

Source of Information: Taylor, R. (1985). Measuring adaptive behavior: Issues and instruments. *Focus on Exceptional Children, 18,* 2, 5-8.

VINELAND ADAPTIVE BEHAVIOR SCALE

S. Sparrow, D. Bolla, and D. Cicchetti

Target Population: Mentally retarded.

Norm Groups: Ages 3-18. A large portion of norm group also used in Kaufman Assessment Battery for Children.

Purpose of Instrument: Describe adaptive behavior skills and prescribe instruction.

Title of Subcomponents: Communication, Daily Living Skills, Socialization, Motor Skills, Adaptive Behavior Composite and two forms have a Maladaptive Behavior Domain.

Types of Scores: Standard scores, national percentile ranks, stanines and age equivalents.

Scoring Information: Observer rates items 0-2; hand scored.

Validity: Observation and interview (informal assessment).

Reliability: Informal assessment.

Copyright: 1984. **Date of Most Recent Manual:** 1984.

Publisher: American Guidance Services.

Comments: This is a new instrument in 3 forms: Interview-Survey Form, Interview Edition - Expanded Forms and the Classroom Edition. Has summary report for parents. "Standardization was well constructed, and its theoretical base is sound." Overall one of the most promising.

Source of Information: Taylor, R. (1983).

BEHAVIOR EVALUATION SCALE

Stephen B. McCarney, James E. Leigh, and Jane A. Cornbleet

Target Population: School age behavior disordered/emotionally disturbed students.

Norm Groups: 1,018 students from 10 states representing the four U. S. geographic regions.

Purpose of Instrument: Instrument to document decisions regarding diagnosis, placement, and programming of behaviorally disordered/emotionally disturbed children and adolescents.

Title of Subcomponents: Learning Problems, Interpersonal Difficulties, Inappropriate Behavior, Unhappiness/Depression, Physical Symptoms/Fears.

Types of Scores: Standard scores for each scale and a standard quotient for total scale.

Scoring Information: Observer assigns ratings from 1-7, obtains raw score on each scale, and converts to standard score using chart.

Validity: Correlation of scales to BRP is .19 to .65. Regular and BD students receive substantially different behavior quotient; scales each are measuring somewhat different factors.

Reliability: Internal Consistency of scales .76-.96; test-retest .97 for 10 day period.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Educational Services, P. O. Box 1835, Columbia, MO 65205.

Comments: Teacher individual observation of 10-20 minutes. Manual appears to be complete; standardization procedure appears thorough.

Source of Information: Manual.

BEHAVIOR RATING PROFILE (BRP)

Linda L. Brown and Donald D. Hammill

Target Population: Grades 1-12. Can be used with disturbed and learning disabled.

Norm Groups: Norm groups.

Purpose of Instrument: "Identifies elementary and secondary students who are thought to have behavior problems and settings in which those problems seem prominent. Also identifies individuals who have differing perceptions about the behavior of a student."

Title of Subcomponents: Student rating scales, home, school, peer; the parent rating scale and the sociogram.

Types of Scores: Self-ratings, parent ratings.

Scoring Information: Multiple item paper-pencil battery consisting of six independent, individually normed measures. Scales may be used separately or in conjunction with other BRP components.

Validity: Item selection data appear good.

Reliability: Informal assessment.

Copyright: 1978 **Date of Most Recent Manual:** Not available

Publisher: PRO-ED.

Comments: Not available for group use. Shows much promise.

Source of Information: Sweetland, R. & Keyser, D. (1983).

THE DEVEREUX ADOLESCENT BEHAVIOR RATING SCALE

Spivack, Spotts, and Haimen

Target Population: Ages 13-18.

Norm Groups: Not available.

Purpose of Instrument: Assess behavior symptoms of normal and emotionally disturbed adolescents.

Title of Subcomponents: Unethical Behavior, Defiant-Resistive, Domineering-Sadistic, Heterosexual Interest, Hyperactive-Expansive, Poor Emotional Control, Need Approval and Dependency, Emotional Distance, Physical Inferiority-Timidity, Schizoid Withdrawal, Bizarre Speech and Cognition, Bizarre Action plus others.

Types of Scores: Standard scores.

Scoring Information: Observer rates student on 84 paper-pencil items and evaluates.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1967 **Date of Most Recent Manual:** Not given.

Publisher: The Devereux Foundation.

Comments: Observation usually requires 10-15 minutes. Would be helpful for severely BD/ED students.

Source of Information: Sweetland, R. & Keyser, D. (1983).

THE DEVEREUX CHILD BEHAVIOR RATING SCALE

George Spivack and Jules Spotts

Target Population: Severely handicapped students.

Norm Groups: Children ages 8-12 who are emotionally disturbed or mentally retarded.

Purpose of Instrument: Provide a profile of problematic behaviors that are observed in a day-to-day living situation over a period of 2 weeks.

Title of Subcomponents: Distractibility, Poor Self-Care, Pathological Use of Senses, Emotional Detachment, Social Isolation, Poor Coordination and Body Tonus, Incontinence, Messiness-Sloppiness, Inadequate Need for Independence, Unresponsiveness to Stimulation, Proneness to Emotional Upset, Need for Adult Contact, Anxious-Fearful Ideation, Impulse Ideation, Inability to Delay, Social Aggression, Unethical Behavior.

Types of Scores: Standard score units.

Scoring Information: Evaluator/observer rates on scale of 1-5 and then hand scored.

Validity: Two research studies indicate reliability.

Reliability: .80-.99.

Copyright: 1966 **Date of Most Recent Manual:** Not given.

Publisher: The Devereux Foundation.

Comments: Administration/observation requires about 20 minutes and scoring about 10 minutes. The *Devereux Elementary School Behavior Rating Form* may be more appropriate for public school elementary teachers to use.

Source of Information: Polite, Kenneth. Keyser, D. & Sweetland, R. (1984) V. II.

JESNESS BEHAVIOR CHECK LIST

Carl F. Jesness

Target Population: Adolescents, especially delinquent adolescents.

Norm Groups: Not available.

Purpose: Measure behavioral tendencies of adolescents.

Titles of Subcomponents: Fourteen bipolar tendencies (not listed).

Types of Scores: Not available.

Scoring Information: Hand scored or scoring service.

Validity: Not available - is informal assessment.

Reliability: Inter-rater: generally satisfactory.

Copyright: Not given **Date of Most Recent Manual:** Not given.

Publisher: Consulting Psychology Press.

Comments: Administration time 10-20 minutes usually. Two forms: Self-Appraisal Form and Observers Form.

Source of Information: Consulting Psychology Press Catalog.

JESNESS INVENTORY

Carl F. Jesness

Target Population: Ages 8-18.

Norm Groups: 970 delinquent and 1,075 nondelinquent males plus 450 delinquent and 811 nondelinquent females.

Purpose of Instrument: Assess personality characteristics, classification of delinquents, and measure attitude change over a relatively short time.

Title of Subcomponents: Social Maladjustment, Value Orientation, Immaturity, Autism, Alienation, Manifest Aggression, Withdrawal, Social Anxiety, Repression, Denial, the Asocial Index.

Types of Scores: T scores.

Scoring Information: Hand scored or scoring service.

Validity: Controversial*.

Reliability: .62-.88 split half and .40-.79 test-retest (marginal).

Copyright: 1962 **Date of Most Recent Manual:** 1983

Publisher: Consulting Psychology Press, Inc.

Comments: Administration time - 20-30 minutes usually; written at approximately fourth grade level. *Many psychometric problems exist with this scale but it appears better for its purpose than other exisiting instruments and more standardized than informal assessment. One should not use it with nondelinquents.

Source of Information: K. Mooney in Keyser, D. & Sweetland, R., V. 1, (1984).

LEARNING DISABILITY EVALUATION SCALE

Stephen B. McCarney

Target Population: School-age learning disabled students.

Norm Groups: 1,666 learning disabled and regular education students from 71 school districts in 19 states adequately representing the four major geographic U.S. regions.

Purpose of Instrument: Provide comprehensive reporting mechanism for teacher to gather performance observations on academic tasks and related activities related to learning disabilities.

Titles of Subcomponents: Listening, Thinking, Speaking, Reading, Writing, Spelling, Mathematical Calculations.

Types of Scores: Standard scores 0-20 and Learning Quotient.

Scoring Information: Hand scoring of raw scores on each scale. Use chart to convert.

Validity: Subscales correlate .46-.63 with WISC-R; .39-.63 with PIAT; and .59-.65 with Woodcock Reading Mastery; plus other measures reflect strong validity.

Reliability: .96-.98 inter-rater reliability; .98 test retest after 30 days.

Copyright: 1983. **Date of Most Recent Manual:** 1983.

Publisher: Hawthorne Educational Services, P. O. Box 7553, Columbia, MO 65205.

Comments: Time 20 minutes; manual appears to be thorough. Standardization, including item selection, appears carefully and thoroughly completed.

Source of Information: Manual.

WELLER-STRAWSER SCALES OF ADAPTIVE BEHAVIOR: FOR THE LEARNING DISABLED (WSSAB)

Carol Weller and Sherri Strawser

Target Population: Child, teen, grades 1-12.

Norm Groups: Not available.

Purpose of Instrument: Determine severity of disabilities and to identify areas requiring remedial attention.

Title of Subcomponents: Social Coping, Relationships, Pragmatic Language, Production, and Totals.

Types of Scores: Total score and subtest scores.

Scoring Information: Examiner evaluated.

Validity: Teacher ratings.

Reliability: Informal assessment.

Copyright: 1981 **Date of Most Recent Manual:** Not given.

Publisher: Academic Therapy Publications.

Comments: Scores on subtests range from mild to moderate and moderate to severe. Not suitable for group administration. Observer needs about 15 minutes per student observation.

Source of Information: Botterbusch, C. & Michael, N. (1985).

Aptitude

Aptitudes are distinguished from intelligence in that aptitudes are considered to be separate abilities such as verbal, numerical, spatial, or musical aptitudes. Intelligence is general ability. Aptitudes are to be distinguished from achievement in that aptitudes are potential or abilities while achievement is accomplishment. A student has an aptitude for verbal reasoning but reads at the fourth grade level (achievement). Aptitude, intelligence, and achievement all are related in that students in general tend to score similarly on all three. Individual students, however, may show vast differences between any two or among all three types of measures. These differences are important for classification, instruction, and career planning.

Aptitude tests provide guidance for group placement of students and adults-in-general at the upper and middle ranges of ability. Individual placement decisions are less valid than group placement. Because of problems involved in predicting aptitude of individuals and for persons scoring at the lower range of ability, data from aptitude tests must be compared with other data.

Reliability of aptitude measures is considered to be relatively good when instruments are given under appropriate assessment conditions. Validity, however, varies greatly from one instrument to another. Hence, the validity must be checked for each instrument before selecting it for the person's assessment plan.

The aptitude instruments are divided into two types to facilitate use. The general aptitude section covers most of the instruments known as aptitude batteries because of their measuring multiple aptitudes. The specific aptitudes category covers aptitude tests in a single area.

ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)-14

Target Population: Youth ages 16 and up.

Norm Groups: 12,000 men and women, ages 16-23, constituting a national representative sample.

Purpose of Instrument: Assess students (grades 11-12 and postsecondary) who can profit from additional occupational training in civilian and military settings.

Title of Subcomponents: General Science, Arithmetic Reasoning, Word Knowledge, Paragraph Comprehension, Numeric Operations, Coding Speed, Auto and Shop Information, Mathematics Knowledge, Mechanical Comprehensive, Electronics Information.

Types of Scores: Norms available for 11th graders, 12th graders, 2-year college students, and a composite group. Percentiles and confidence bands, standard scores.

Scoring Information: Scored by military. Reports are prepared for the student and counselor. Postcard mailed to parents stating student has taken the battery and received the results, and encourages discussion of results.

Validity: Compared to school grades, .90; military specialties, .36-.77; GATB, .23-.58.

Reliability: .84-.95 alternate form.

Copyright: 1984 **Date of Most Recent Manual:** 1984

Publisher: Department of Defense.

Comments: Military personnel will administer and return results. Reading level, 6th to 8th grade. Group administered. Counselor's Manual has 129 pages.

Source of Information: ASVAB Counselor's Manual.

CAREER ABILITY PLACEMENT SURVEY (CAPS)

Target Population: Intermediate, high school, and community college students.

Norm Groups: Original norms were based on a national sampling of intermediate, high school, and community college students.

Purpose of Instrument: To provide "a brief measure of multi-abilities related to entry requirements in occupations and careers."

Titles of Subcomponents: Mechanical Reasoning, Spatial Relations, Verbal Reasoning, Numerical Ability, Language Usage, Word Knowledge, Perceptual Speed and Accuracy, and Manual Speed and Dexterity.

Types of Scores: Normed graph matching abilities to 14 occupational category scales.

Scoring Information: Hand or machine scored. Machine scoring forms must be mailed to be computer-scored.

Validity: Validity coefficients ranged from upper .40's to the .80's for achievement test comparisons.

Reliability: Split-half, test-retest, and alternate forms. Reliability coefficients ranged from .60's to .90's.

Copyright: 1981. **Date of Most Recent Manual:** 1981.

Publisher: EDITS, Inc.

Comments: The CAPS may be a good alternative to the longer aptitude tests for average or below average individuals with about an eighth grade reading level. Its use as a screening battery is suggested. Group or individual - 45 minutes to one hour.

Source of Information: Botterbusch, K. & Michael, N. (1985).

COMPREHENSIVE ABILITY BATTERY

A. Hakstian and R. Cattell

Target Population: Ages 15 & over not in college programs.

Norm Groups: 2,000 high school students in Canada and the United States.

Purpose of Instrument: Measure ability in a wide range of areas.

Title of Subcomponents: Verbal Ability, Speed of C osure, Rote Memory, Mechanical Ability, Spelling, Auditory Ability, Word Fluency and Original v.

Types of Scores: Not available.

Scoring Information: Last six tests must be hand scored.

Validity: Predicts academic achievement as well as DAT (.58) & GATB (.48).

Reliability: Correlations mostly in the .70's and .80's.

Copyright: 1975-77. **Date of Most Recent Manual:** 1976.

Publisher: Institute of Personality and Ability Testing.

Comments: Group administration in about 2.5 hours. Reading level not suited for mentally retarded.

Source of Information: Bolton, B. in Keyser, D. & Sweetland, R., V. 1, (1984).

DIFFERENTIAL APTITUDE TEST (DAT)

Target Population: Grades 8-12 and adults.

Norm Groups: Random sample of 63,000 public school students in grades 8-12 in the United States.

Purpose of Instrument: "To provide an integrated, scientific, and well-standardized procedure for obtaining ability measures for purposes of educational and vocational guidance.

Title of Subcomponents: Verbal Reasoning, Numerical Ability, Abstract Reasoning, Clerical Speed and Accuracy, Mechanical Reasoning, Space Relations, Spelling, and Language Usage.

Types of Scores: Raw scores and percentile scores.

Scoring Information: Hand or machine scored. The hand scored forms require stencils and take about 20 minutes to score.

Validity: High for students-in-general.

Reliability: Split-half and test-retest in the low .90 range.

Copyright: 1947, 1973, 1974 **Date of Most Recent Manual:** 1973

Publisher: The Psychological Corporation.

Comments: Especially useful in providing a general measure of several aptitudes in planning education and training. Requires a sixth grade reading level. Administration - group administered-takes about four hours to administer.

Source of Information: Botterbusch, K. & Michael, N. (1985)

GENERAL APTITUDE TEST BATTERY (GATB)

Target Population: Employment service applicants.

Norm Groups: 4,000 workers in addition to maturation study of ninth and tenth graders.

Purpose of Instrument: To assess "vocationally significant aptitudes" that are useful in vocational counseling, training selection, job selection, and job placement.

Title of Subcomponents: Name Comparison, Computation, Three-Dimension Space, Vocabulary, Tool Matching, Arithmetic Reasoning, Form Matching, Mask Making, Place, Turn, Assemble, and Disassemble.

Types of Scores: Aptitude scores are compared to requirements for specific jobs.

Scoring Information: Scoring may be done by hand or machine. Hand scoring takes about 20 minutes.

Validity: Not available.

Reliability: Paper and pencil tests are high; apparatus tests are moderately high.

Copyright: Not copyrighted. **Date of Most Recent Manual:** 1982.

Publisher: Available from state employment services.

Comments: State employment services must give prior approval and training. Each user must be "certified" and all materials are ordered only after approval. Group administered in about 2 1/2 hours.

Source of Information: Botterbusch, K. & Michael, N. (1985)

NON-READING APTITUDE TEST BATTERY (NATB)

Target Population: Non-reading persons grades 9-12 and adults.

Norm Groups: 4,000 non-disadvantaged persons used to develop norms for the GATB plus 617 Virginians.

Purpose of Instrument: Assess vocational aptitudes of very low reading skills students and adults.

Title of Subcomponents: Intelligence, Verbal Aptitude, Numerical Aptitude, Spatial, Form Perception, Clerical, Motor Coordination, Finger and Manual Dexterity.

Types of Scores: Standard scores.

Scoring Information: Machine scoring.

Validity: Correlates with GATB equivalent subtests .50-.69, but no data computed for the NATB.

Reliability: Not reported.

Copyright: 1965, 1982 **Date of Most Recent Manual:** 1982

Publisher: U. S. Government Printing Office. Contact is local office of State Employment Service.

Comments: Administration time: group in approximately 1 hour and 47 minutes (1982 edition). Reviewers suggest caution in using the NATB.

Source of Information: MMY9:1305.

APTICOM

Target Population: Vocational special needs youth and adults.

Norm Groups: Not available.

Purpose of Instrument: Assess aptitude and interests.

Title of Subcomponents: Eye-Hand, General Learning, Verbal, Numerical, Spatial Perception, Form Perception, Clerical, Manual Dexterity, Eye-Hand-Foot Coordination.

Types of Scores: Standard scores.

Scoring Information: Self-scoring and self-timing.

Validity: Most coefficients with the GATB are .65-.87 and with USES Interest Inventory are .70-.85.

Reliability: Most subtests for aptitude are .71-.89 and interest are .74-.85, Test-retest.

Copyright: 1984, 1985 **Date of Most Recent Manual:** 1985

Publisher: Vocational Research Institute

Comments: Time: 90 minutes for aptitude and may be administered to four students concurrently.

Source of Information: Apticom brochures.

ARLIN TEST OF FORMAL REASONING

Patricia Kennedy-Arlin

Target Population: Grades 6-12.

Norm Groups: 6,500 students ages 11-19 and adults.

Purpose of Instrument: Assess cognitive abilities for special placement and for the eight abilities of formal operations.

Title of Subcomponents: Classification, Multiplicative Compensations, Probability, Combinations, Proportions, Forms of Conservation Beyond Direct Verification, Coordination of Two or More Systems of Response, Mechanical Equilibrium.

Types of Scores: Not given.

Scoring Information: Hand or machine scored for raw scores on subtests and total.

Validity: .55-.94.

Reliability: .76-.89 test-retest for eight weeks to six month intervals.

Copyright: 1984 **Date of Most Recent Manual:** 1984

Publisher: CTB/McGraw Hill or Slossan Educational Publications, Inc.

Comments: Administration: 45 minutes to groups or individuals. This is a Piagetian Cognitive Development Test and may be used in the selection of students for gifted programs. Reading level is reported to be 6th grade.

Source of Information: Fakouri, M. E. in Keyser and Sweetland, Vol. II, (1984).

BENNETT HAND-TOOL DEXTERITY TEST

Target Population: High school and adults.

Norm Groups: Not available.

Purpose of Instrument: To provide a measure of proficiency in using ordinary mechanical tools.

Title of Subcomponents: Not applicable.

Types of Scores: Not available.

Scoring Information: One time score in minutes and seconds to completion is obtained, and is then compared with norm tables.

Validity: Correlations with foreman ratings .14 to .51. Correlations with other tests. .11 and .42.

Reliability: Test-retest studies of .91 and .81.

Copyright: 1965 **Date of Most Recent Manual:** Not given.

Publisher: The Psychological Corporation.

Comments: Individually administered apparatus test usually takes between five and 20 minutes. Minimum validation data.

Source of Information: Botterbusch, K. & Michael, N. (1985).

BENNETT MECHANICAL COMPREHENSION TEST (BMCT)

Target Population: High school and adults.

Norm Groups: Industrial applicants, employers, and students.

Purpose of Instrument: Measures ability to perceive and understand the relationship of physical forces and mechanical elements in practical situations.

Title of Subcomponents: Not applicable

Types of Scores: Percentile ranks

Scoring Information: The BMCT takes about 15 minutes to hand score.

Validity: Validity coefficients generally significant at the .05 level.

Reliability: Reliability coefficients range from .81 to .93.

Copyright: 1969 **Date of Most Recent Manual:** 1980

Publisher: Psychological Corp.

Comments: Group or individually administered, paper-pencil test with a time limit of 30 minutes. Requires reading.

Source of Information: Botterbusch, K. & Michael, N. (1985).

COMPUTER APTITUDE, LITERACY AND INTEREST PROFILE

Mary S. Poplin, Daniel E. Drew, and Robert S. Gable

Target Population: Ages 12-60 including persons with low reading levels.

Norm Groups: Not available.

Purpose: Address computer-related abilities.

Titles of Subcomponents: Estimation, Graphic Patterns, Logical Structures, Series, Computer Interest, Computer Literacy.

Types of Scores: Not given.

Scoring Information: Hand score in ten minutes.

Validity: Not available.

Reliability: Not available.

Copyright: 1984. **Date of Most Recent Manual:** 1984.

Publisher: PRO-ED; also available from C&B/McGraw Hill.

Comments: Administration: Individual or Group in about one hour.

Source of Information: Catalog; MMY 9:259.

CRAWFORD SMALL PARTS DEXTERITY TEST

Target Population: High school and adult.

Norm Groups: 1956 norm groups includes male and female applicants, female employees, male veterans, and male students.

Purpose of Instrument: To "measure fine eye-hand coordination."

Title of Subcomponents: Not true subtests, consists of Part I - Pins and Collars and Part II - Screws.

Types of Scores: Not available.

Scoring Information: The score for each part is the time required to complete the entire task.

Validity: Low.

Reliability .80's and .90's.

Copyright: 1956, 1981 **Date of Most Recent Manual:** 1981

Publisher: The Psychological Corporation.

Comments: A widely used test to determine a person's dexterity skills using small tools. Administration - individual test takes about 15 minutes.

Source of Information: Botterbusch, K. & Michael, N.

DETROIT TESTS OF LEARNING APTITUDES

Donald D. Hamill

Target Population: Ages 6-17.

Norm Groups: 1,523 students from 30 states.

Purpose of Instrument: Obtain profile of learning strengths and weaknesses.

Title of Subcomponents: Linguistic, Cognitive, Attention, Motor, and General Intelligence (11 subtests).

Types of Scores: Raw scores, percentiles and standard scores.

Scoring Information: Hand scored.

Validity: .60-.80 correlation with WISC-R and Peabody Picture Vocabulary.

Reliability: .90 internal consistency; .80 test-retest.

Copyright: 1985 **Date of Most Recent Manual:** 1985

Publisher: American Guidance Service or Pro-Ed.

Comments: Individually administered. Detroit Tests of Learning Aptitude - Primary is a version for ages 3 through 9. The Detroit is useful for persons with learning disabilities.

Source of Information: AGS and Pro-Ed catalogs and test manual.

DVORINE COLOR VISION TEST
DVORINE PSEUDO-ISOCHROMATIC PLATES

Israel Dvorine and Louis Sloan

Target Population: Job applicants in selective fields; grades preschool through adult.

Norm Groups: Not available.

Purpose of Instrument: Quick test for general screening for color blindness; assess protanoid and deuteranoid types of red-green color blindness.

Title of Subcomponents: Not applicable.

Types of Scores: Number correct.

Scoring Information: Number correct, examiner scored.

Validity: Not available.

Reliability: Not available.

Copyright: 1944, 58 **Date of Most Recent Manual:** Not given.

Publisher: Psychological Corporation; Lafayette Instrument Company.

Comments: Individually administered in 2-3 minutes.

Source of Information: Psychological Corporation Catalog and Sweetland, R. and Keyser, D. (1983).

GENERAL CLERICAL TEST

Target Population: Grades 9-16 and clerical applicants.

Norm Groups: Applicants and employees in clerical and secretarial jobs; extensively updated in 1972.

Purpose of Instrument: Select able applicants for clerical positions.

Title of Subcomponents: Clerical Speed and Accuracy, Numerical Ability, and Verbal Facility.

Types of Scores: Percentile ranks.

Scoring Information: Hand scored with keys.

Validity: .40-.50 course grades; .16-.56 with supervisor ratings.

Reliability: .88-.96.

Copyright: 1969, 1972 **Date of Most Recent Manual:** 1972

Publisher: Psychological Corporation.

Comments: Group administration in approximately 46 minutes. Test compares favorably with other clerical tests.

Source of Information: MMY8:103.

McCARTHY SCALES OF CHILDREN'S ABILITIES

Target Population: Ages 2.5 - 8.5.

Norm Groups: 1,032 children in a national stratified sample.

Purpose of Instrument: Assess intellectual and motor development of children.

Title of Subcomponents: Verbal Scale, Quantitative Scale, Perceptual Performance Scale and General Cognitive Index, Memory Score, and Motor Development Score.

Types of Scores: Standard scores.

Scoring Information: Hand scored.

Validity: Predictive validity reported as good.

Reliability: .79-.88 internal consistency and .69 to .90 average test-retest over one month period.

Copyright: 1970, 1972 **Date of Most Recent Manual:** 1972

Publisher: Psychological Corporation.

Comments: Administration individually administered in 45 minutes to one hour.

Source of Information: MMY9:671.

MINNESOTA CLERICAL TEST (MCT)

D. M. Andrew, D. Peterson, and H. Longstaff

Target Population: Grades 8-12 and adults.

Norm Groups: 25 industrial groups.

Purpose of Instrument: Measure clerical speed and accuracy.

Title of Subcomponents: Number Comparison and Name Comparison.

Types of Scores: Percentile ranks.

Scoring Information: A "guessing" formula is applied to compute the raw score. Requires about ten minutes to hand score.

Validity: Sparse validity studies makes use somewhat questionable.

Reliability: Test-retest coefficients over .80 for numbers and over .85 for names.

Copyright: 1933, 1959, 1979 **Date of Most Recent Manual:** 1979

Publisher: The Psychological Corporation.

Comments: Group administered in about 15 minutes.

Source of Information: Botterbusch, K. & Michael, N. (1985) & 6MMY.

MINNESOTA RATE OF MANIPULATION TEST

Target Population: High school and adult.

Norm Groups: 1,946 unemployed persons; 1,957 young people who were employed or seeking employment.

Purpose of Instrument: To assess arm-hand dexterity.

Titles of Subcomponents: Placing Test, Turning Test, Displacing Test, One-Hand Turning and Placing Test, Two-Hand Turning and Placing Test.

Types of Scores: Percentiles, standard scores, stanines, or verbal ratings.

Scoring Information: The time in seconds required to complete each test is totaled. The total is compared with the appropriate number of trials. Scoring for each subtest takes less than five minutes.

Validity: .32 to .57

Reliability: Two-trial between the four subtests ranged from .87 to .95.

Copyright: 1969 edition **Date of Most Recent Manual:** 1969

Publisher: American Guidance Service

Comments: Individual or group-administered. Major concerns are age of test and insufficient norm groups. Establishment of local norms may prove helpful. Administration time—10 minutes or less.

Source of Information: Botterbusch, K. & Michael, N. (1985)

MINNESOTA SPATIAL RELATIONS TEST - REVISED

Target Population: Ages 16 and over.

Norm Groups: Several norm groups exist such as high school students, vocational-technical students, office workers, industrial workers, and machinists.

Purpose of Instrument: Assess spatial visualization by matching shapes and sizes.

Title of Subcomponents: Time and Errors.

Types of Scores: Not reported.

Scoring Information: Hand scoring.

Validity: Correlates with GATB scores .80 for Time and .60 for Errors.

Reliability: .90 for Time scores and .80 for Error scores.

Copyright: 1930, 1979 **Date of Most Recent Manual:** 1979

Publisher: American Guidance Service, Inc.

Comments: Administration time: 10-20 minutes.

Source of Information: Kapes, J. & Mastie, M. (1982); MMY9:723.

OASIS OCCUPATIONAL APTITUDE SURVEY

Target Population: Grades 8-12.

Norm Groups: 1,398 students from 11 states.

Purpose of Instrument: Measure student aptitudes.

Titles of Subcomponents: General Ability, Verbal Aptitude, Numerical Aptitude, Spatial Aptitude, Perceptual Aptitude, and Mechanical Aptitude.

Types of Scores: Keyed directly to DOT, GOE, and Worker Trait Group Guide.

Scoring Information: Hand scored

Validity: .60-.87

Reliability: .78-.90

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Pro-Ed.

Comments: Normed on same sample as OASIS Interest Schedule. Group administered—appears to be low reading.

Source of Information: Pro-Ed catalog.

PURDUE PEGBOARD

Target Population: Industrial job applicants.

Norm Groups: Eight groups of male and female industrial workers and two general groups of applicants and college students.

Purpose of Instrument: Aid in the selection of employees for industrial jobs requiring manual dexterity.

Titles of Subcomponents: Right Hand Only, Left Hand Only, Both Hands Simultaneously, and Assembly.

Types of Scores: Percentile scores

Scoring Information: Scoring is performed after each section is administered. The scores are the number of pins placed on assemblies, completed within the time periods.

Validity: Low

Reliability: Test/retest reliability correlations between .66 & .79.

Copyright: 1948, 1961, 1968 **Date of Most Recent Manual:** 1968

Publisher: Science Research Associate, Inc.

Comments: Group-administered in about 15 minutes. Test appears to stand mostly on "face" validity.

Source of Information: Botterbusch, K. & Michael, N. (1985).

REVISED MINNESOTA PAPER FORM BOARD TEST (R-MPFB)

Rensis Likert and W. H. Quasha

Target Population: Applicants for jobs requiring spatial perception and mechanical-spatial ability.

Norm Groups: Applicants, employed workers, prison inmates and military.

Purpose of Instrument: A nonverbal estimate of intellectual functioning.

Title of Subcomponents: Not Applicable.

Types of Scores: Percentile ranks.

Scoring Information: Forms AA and BB can be hand scored in about 20 minutes. Forms MA and MB can be machine scored using IBM 805 answer sheets.

Validity: Not available.

Reliability: Alternate form reliability correlations range from .71 to .78. Test-retest from .79 to .90.

Copyright: 1941, 1970 **Date of Most Recent Manual:** 1970

Publisher: The Psychological Corporation.

Comments: Group administered paper and pencil test. Administration time is about 20 minutes. Both educational (grades 10-12) and industrial norms are given. This spatial aptitude test is similar to the GATB spatial subtest. French-Canadian version available.

Source of Information: Botterbusch, K. & Michael, N. (1985).

SRA TEST OF MECHANICAL CONCEPTS

Steven Stenard and Kathleen Bode

Target Population: Grades 8-12 and adults.

Norm Groups: 785 high school juniors and seniors distributed nationally.

Purpose of Instrument: Assess individuals for hire, promotion or training for jobs like assembler, machinist, factory production, maintenance mechanic.

Title of Subcomponents: Mechanical Interrelationships, Mechanical tools and Devices, Spatial Relations, and Total.

Types of Scores: Not given.

Scoring Information: Hand scored.

Validity: .20-.40 for training.

Reliability: .69-.88.

Copyright: 1976 **Date of Most Recent Manual:** 1976

Publisher: SRA.

Comments: Test has a higher verbal loading than is appropriate for the persons it is proposed to assess. Test is reported as inappropriate for people without specialized training in the mechanical area.

Source of Information: MMY8:1045; Kapes, J. & Mastie, M. (1985).

SCHOOL AND COLLEGE ABILITY TESTS III (SCAT)

Target Population: Grade range 3.5 through 12.9.

Norm Groups: Stratified national sample.

Purpose of Instrument: Compare students, track progress and estimate future performance on the SAT.

Title of Subcomponents: Verbal, Quantitative, and Total.

Types of Scores: Standard, percentile and stanine.

Scoring Information: Not reported.

Validity: Strong for predicting academic achievement.

Reliability: Not reported.

Copyright: 1966, 1979, 1980 **Date of Most Recent Manual:** Not given.

Publisher: CTB/McGraw Hill.

Comments: Administration time: individual or group in approximately 40 minutes. Standardized concurrently with Sequential Tests of Educational Progress III.

Source of Information: MMY9:1075

TEST OF COGNITIVE SKILLS

Target Population: Grades 2-12.

Norm Groups: 83,000 children nationwide.

Purpose of Instrument: Measure skills important to success in school setting.

Title of Subcomponents: Sequences, Analogies, Memory and Verbal Reasoning.

Types of Scores: Subtest and total age-based standard score.

Scoring Information: Hand or machine scored.

Validity: Predecessor* correlates .73 with WISC-R Full Scale and .82 (median) with California Achievement Test.

Reliability: Not available.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: CTB/McGraw Hill.

Comments: Individual or group administered; test comes in five levels with administration time varying for levels from 47-53 minutes. *This is a revision of the well-known California Short Form of Mental Maturity.

Source of Information: Trog, M. in Keyser, D. & Sweetland, R., V. 2, (1984).

TEST OF PRACTICAL KNOWLEDGE

J. Lee Wiederholt and Stephen C. Larsen

Target Population: Grades 8-12.

Norm Groups: 1,398 students.

Purpose of Instrument: Assess knowledge for everyday living.

Title of Subcomponents: Personal Knowledge, Social Knowledge, and Occupational Knowledge.

Types of Scores: Not Given.

Scoring Information: Hand scored.

Validity: Correlates highly with Iowa Test of Educational Development and the SRA Achievement Series (.60-.70).

Reliability: .80-.90 internal consistency.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Pro-Ed.

Comments: Administration: 30-40 minutes to individuals or groups.

Source of Information: Pro-Ed Catalog.

VOCATIONAL EDUCATION READINESS TEST (VERT)

E. Thomas, R. Brownlee, J. Shill, and C. Calloway

Target Population: Potential vocational education students.

Norm Groups: 115 regular and 108 EMR students in Mississippi, but tests are basically criterion-referenced rather than norm-referenced.

Purpose of Instrument: Assess student skills early enough to develop IEP objectives so that students can enter vocational education.

Title of Subcomponents: Auto Mechanics, Basic Wiring, Carpentry, Clothing, Masonry, Plumbing, Quantity Foods, and Welding.

Types of Scores: Number and percentage correct; time is either acceptable or unacceptable per local standards.

Scoring Information: Hand scored for time and number correct.

Validity: Based on vocational instructors perceptions and lesson plans.

Reliability: Not available.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: Research and Curriculum Unit for Vocational-Technical Education, Mississippi State University, Mississippi State, MS and the Division of Vocational-Technical Education, Mississippi Department of Education, Jackson, MS.

Comments: Administration: Group. Student is timed from beginning of tasks to end. Many of the required tasks appear to be better measures of skills to be learned in vocational classes than entry skills; hence, useful for VRE's and supplementary teachers.

Source of Information: VERT Manual.

Career Development

Students are described as moving through three steps of career development: career awareness, career exploration, and career preparation. Career maturity is the extent to which an individual is performing those life developmental tasks expected of his/her current age, grade level, or general development (Dick, 1985). This definition is different from the one used in early vocational guidance, where it was equated to occupational maturity or job readiness. Crites (1978) studied ninth to twelfth grade adolescents and concluded that maturity increases with age but that adolescent females tended to be more career mature than males at each age studied.

Special Needs Students

Special needs students are perhaps more like than unlike regular students in their career maturity but do possess major differences. Disadvantaged students have more restricted range of career models to observe, tend to stay in the fantasy stage of development, have problems in coping with their disadvantaged background as well as regular vocational development tasks, have poor self-concepts because of past school failures and lack realistic occupational exposure (Baca, 1981; Campbell, 1975; Moore, 1981; and Davis, 1976).

Handicapped students seem to possess characteristics similar to disadvantaged students. Educable mentally retarded students score lower in career maturity when compared to nonspecial education students. The affective readiness of learning disabled students tends to be lower than cognitive readiness for career exploration and they tend to be less mature in career choice. Immaturity may affect one's ability to maintain employment, become a caring spouse, parent, or friend, and impede social independence. Without adequate role models, both in quality and quantity, students will have difficulty becoming independent (Bingham, 1981; Bingham, 1978; Tinney, 1974; Chubon, 1985; Mori, 1979; Brolin, 1982; and Flugman, Goldman, and Katz, 1979).

Career education programs are needed throughout the school years. Early grade programs should focus on awareness; middle school programs should continue awareness and initiate exploration. Programs for older students should continue with exploration, initiate assessment in relationship to school and job requirements, and include vocational training or preparation. All levels of programs should include daily living skills such as housing, food, dating, preparation for marriage; social skills such as getting along with others, sharing, providing services for others; and vocational skills such as learning about occupations, preparing for entry into an occupation, seeking and retaining employment (Brolin, 1982). Research results indicate that career maturity can be increased through curricula intervention (Drake and Stewart, 1981; Stewart and Drake, 1980; Ashbury, 1974; Gilliland, 1966; Coogan, 1975; Hovanic, 1981; Roberts, 1980; Carey, 1980; Showalter, 1973; Arkansas State Department of Education, 1979; Rask, 1979; and Haden, 1978).

Once career education programs are in place, assessment follows naturally. A number of instruments for this purpose are reviewed on the following pages. The instruments are largely in the occupational domain. This reflects the current state of the art in this area.

BASIC VIEW (VITAL INFORMATION FOR EDUCATION AND WORK)

Target Population: Secondary, post secondary and adult ages in the state of Missouri who have limited reading ability.

Norm Groups: Not normed.

Purpose of Instrument: Provide occupational information on 200 careers primarily unskilled and semi-skilled, at second grade reading level and development of personal profile.

Title of Subcomponents: Career Cards, Institution Cards, and Handbook.

Types of Scores: Not applicable.

Scoring Information: Not available.

Validity: Is not an instrument per se but a system.

Reliability: Not applicable.

Copyright: Updated yearly **Date of Most Recent Manual:** Content updated each year.

Publisher: Missouri VIEW Program (Missouri Department of Elementary and Secondary Education).

Comments: Has accompanying student exploration book written at low verbal level for print package. Software package also available for Apple, TRS, and Commodore. Funded by MODESE. Is an integrated package for assessment and information leading to career decision making. Key to Basic VIEW are 20 career cards. New feature is Search and Learn, a microfiche program.

Source of Information: Basic VIEW materials.

CAREER ADAPTIVE BEHAVIOR INVENTORY

Thomas P. Lombardi

Target Population: 3-15-year-old developmentally disabled students.

Norm Groups: Not available.

Purpose of Instrument: Evaluate strengths and weaknesses for placement in prevocational or vocational education courses.

Titles of Subcomponents: Academics, Communication Interest, Leisure Time, Motor, Responsibility, Self-Concept, Self-Help, Socialization, Task Performance.

Types of Scores: Five-point scale.

Scoring Information: Hand scoring.

Validity: One study of 62 students suggests validity.

Reliability: Not available.

Copyright: 1980. **Date of Most Recent Manual:** Not given.

Publisher: Stoelting

Comments: Rating requires about 30 minutes per pupil. Materials include a manual and an activity book providing ideas for teaching geared to behaviors assessed.

Source of Information: Stoelting catalog and Canonico and Lombardi, 1984.

CAREER ASSESSMENT INVENTORIES FOR THE LEARNING DISABLED

Carol Weller and Mary Buchanan

Target Population: Learning disabled elementary grades and older.

Norm Groups: None.

Purpose of Instrument: Facilitate career development of learning disabled children, youth and adults by assessing personality, psychomotor, and interests.

Title of Subcomponents: Realistic, Investigative, Artistic, Social, Enterprising, Conventional, Verbal Understanding, Conversation, Visual, Spatial, Fine Motor, Gross Motor.

Types of Scores: Raw scores.

Scoring Information: Examiner. Interest inventory completed by student/client and the other two are observational instruments completed by a teacher or counselor.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: Not given. **Date of Most Recent Manual:** Not given.

Publisher: Academic Therapy Publications.

Comments: Individual administration; 10-15 minutes per test and tests are Attribute Inventory, Ability Inventory, and Interest Inventory. Data are to be used with a Job Finder. Due to lack of norms, validity and reliability data, this instrument must be used only for informal assessment.

Source of Information: MMY9:193.

CAREER AWARENESS INVENTORY

L. M. Fadale

Target Population: Grades 3-6; grades 7-12.

Norm Groups: 4,329 students in grades 7-12.

Purpose of Instrument: To assess overall occupational awareness of the individual and to evaluate effectiveness of instructional programs.

Title of Subcomponents: Identity, Training, Models, Function, Prestige, Clusters and Characteristics for Elementary Form. Advanced four scales are Related Occupations, Groupings in Occupations, Work Locations, and Self-Assessment of Career Awareness.

Types of Scores: Raw scores, percentile ranks, stanines, and (optional) local norms.

Scoring Information: Hand scoring 30 minutes by counselor. Machine scoring available.

Validity: Inadequate data available.

Reliability: .80's.

Copyright: 1974 & 1979 **Date of Most Recent Manual:** 1974 for elementary, 1980 for advanced

Publisher: Scholastic Testing Service, Inc.

Comments: Time: 60-90 minutes. Reading: uses long occupational terms and may be measuring reading as much as career awareness. Male-female stereotyping suggested in the elementary level. Usefulness appears to be experimental at this point.

Source of Information: Cole, N. in Kapes, J. & Mastie, M. (1982).

CAREER DEVELOPMENT INVENTORY

D. Super, A. Thompson, R. Lindeman, J. Jordaan, and R. Myers

Target Population: Junior-senior high and college/university.

Norm Groups: 5,000 9-12th graders in 10 schools; 4,000 college/university students.

Purpose of Instrument: To assess career development and vocational maturity, readiness to make pre-occupational and vocational decisions, assess attitudes.

Title of Subcomponents: Career Planning, Career Exploration, Decision-Making, World of Work Information, Knowledge of Preferred Occupational Group, Career Development Attitudes, Career Development - Knowledge and Skills, and Career Orientation Total.

Types of Scores: Standard and scale scores for each of the 8 scales.

Scoring Information: Machine scoring, $2.20 per student, high school form. Three days plus mail time.

Validity: Appears adequate.

Reliability: .57 to .89 for individual scores (alpha coefficients).

Copyright: 1979 & 1981 **Date of Most Recent Manual:** 1981

Publisher: Consulting Psychologists Press.

Comments: Time: 60-85 minutes; self-administered.

Source of Information: Hilton, T. in Kapes, J. & Mastie, M. (1982).

CAREER MATURITY INVENTORY

J. O. Crites

Target Population: Grades 6-12.

Norm Groups: National sample by geographic region and size of school for attitude scale, Form A2 and Competence Test.

Purpose of Instrument: Measure attitudes and competencies for mature decision-making.

Title of Subcomponents: Decisiveness, Involvement, Independence, Orientation, Compromise, Self-Appraisal, Occupational Information, Goal Selection, Planning and Problem Solving.

Types of Scores: Raw scores, standard scores, national reference percentile ranks.

Scoring Information: Machine scoring. Allow 18 days plus mail time. Hand scoring: 20 minutes; local machine scoring possible.

Validity: .20 to .30 with several measures but were nonsignificant with Super's Indices of Vocational Maturity.

Reliability: Internal consistency .50-.72 for subscales of the Attitude Scale; no information found on Competence Test.

Copyright: 1973 & 1978 **Date of Most Recent Manual:** 1978

Publisher: CTB/McGraw-Hill

Comments: Time: 2 hours and 40 minutes.

Source of Information: Kapes, J. & Mastie, M. (1982).

CAREER OCCUPATIONAL SYSTEM (COPSYSTEM), FORM P

L. Knapp-Lee, L. Knapp, and R. Knapp

Target Population: Grades 9 to adult.

Norm Groups: 4,000 college students in all 50 states.

Purpose of Instrument: Provide activity interest scores related to occupational clusters.

Titles of Subcomponents: Science - Medical, Science - Physical, Technology - Electrical, Technology - Mechanical, Outdoor - Nature, Outdoor - Agribusiness, Business-Finance, Business Management, Computation, Communication - Written, Communication - Oral, Arts - Performing, Arts - Design, Service - Instructional, Service - Social.

Types of Scores: Percentiles.

Scoring Information: Hand scoring.

Validity: Factor leadings suggest the scales are each measuring different factors. Correlations with Strong-Campbell are positive.

Reliability: Internal consistency of .81-.94; Test-retest after one week of .85-.99.

Copyright: 1983. **Date of Most Recent Manual:** 1982-83.

Publisher: EDITS/Educational and Industrial Testing Service.

Comments: Time 30-50 minutes. Inventory is part of a system with CAPS (abilities) and COPES (values). Also, COPS-R, a shorter, lower reading level and easier self-scoring form. California Occupational Preference System is an earlier inventory by the authors.

Source of Information: COPS-P examiner's manual.

CAREER PLANNING PROGRAM

American College Testing Program

Target Population: Grades 8-10, Grades 11-adult.

Norm Groups: Level I: 8,882 8th grade and 10,169 9th grade national sample; Level II: 17,137 students enrolled in 100 2-year institutions. Local norms for ability measures available on student report.

Purpose of Instrument: To help students identify and explore personally relevant occupations and educational programs.

Title of Subcomponents: Six abilities scales, 6-8 interest scales, 6-7 experience scales, Exploration priority indicators. Level II only: English and Math placement composites and estimated ACT assessment composite score.

Types of Scores: Stanine and percentile rank band.

Scoring Information: Machine scoring. Takes 5-7 days plus mail time.

Validity: Ability scales are predictive of grades; modest correlations with other preferenced inventories (interests).

Reliability: .72-.91 test-retest.

Copyright: 1974 & 1976 **Date of Most Recent Manual:** 1974, 1977

Publisher: American College Testing Program, P. O. Box 168, Iowa City, IA 52243.

Comments: Time: 151-152 minutes total. Appears to be a good set of instruments and mini-course for high ability students.

Source of Information: Mehrens in Kapes, J. & Mastie, M. (1982).

CAREER SKILLS ASSESSMENT PROGRAM

The College Board

Target Population: Grades 9-14 and adults.

Norm Groups: Sample drawn from five states; recommend developing local norms.

Purpose of Instrument: Guidance and insight into career planning and decision-making and provide a basis for staff to evaluate extent which students have mastered fundamental career development principles.

Title of Subcomponents: Self-Evaluation and Development Skills, Personal Economics Skills.

Types of Scores: Standard scores and percentiles.

Scoring Information: Hand scoring by student, clerk, counselor; takes about five minutes.

Validity: Little data, but one study does support validity.

Reliability: .85-.93 internal consistency.

Copyright: 1978 **Date of Most Recent Manual:** 1978

Publisher: The College Board.

Comments: Time: 40-60 minutes; high reading skills required. Is "a multiple-use evaluation and self-assessment program". Is really an instructional tool. Has six separate booklets.

Source of Information: Westbrook and Rogers in Kapes, J. & Mastie, M. (1982).

HALL OCCUPATIONAL ORIENTATION INVENTORY

L. B. Hall & R. B. Tarrier

Target Population: Grades 3-7; grades 8-adults and Adult Basic (for reading handicapped adults).

Norm Groups: Not normative.

Purpose of Instrument: Instruction not measurement - to broaden occupational considerations and recognition of values and needs.

Title of Subcomponents: 23 scales such as Creativity - Independence, Risk, Information Understanding, Belongingness, Security.

Types of Scores: Raw scores.

Scoring Information: Machine or hand. 10 minutes by counselor.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1971 & 1976 **Date of Most Recent Manual:** 1976

Publisher: Scholastic Testing Service.

Comments: Time: approximately 40 minutes. Needs are considered the primary organizing principle for person's motivational life. Includes a 31 page Career Education Reader. The package is best used for group discussion by counselor or teacher. Psychometrically has many deficiencies.

Source of Information: Frank, A. in Kapes, J. & Mastie, M. (1982).

THE HARRINGTON-O'SHEA CAREER DECISION-MAKING SYSTEM

Target Population: Grade 7 to adults.

Norm Groups: About 12,000 junior high school and college students surveyed as a national standardization.

Purpose of Instrument: To provide detailed occupational information from the interpretation of a combined self-assessment and interest inventory.

Title of Subcomponents: Crafts, The Arts, Scientific, Social, Business, Clerical.

Types of Scores: Percentile.

Scoring Information: Machine scoring service and hand scoring by student.

Validity: Non-conclusive data reported.

Reliability: .90 internal consistency; .75-.94 shortterm test-retest.

Copyright: 1976, 1982 **Date of Most Recent Manual:** 1982

Publisher: American Guidance Service.

Comments:

Source of Information: Willis in Kapes, J. & Mastie, M. (1982); Droge, R. in Keyser, D. and Sweetland, R., V.I, (1984).

JUDGEMENT OF OCCUPATIONAL BEHAVIOR - ORIENTATION (JOB-O)

Target Population: 7th grade through adult; has been used at sixth grade through re-entry adult levels.

Norm Groups: JOB-O is not a norm-referenced test.

Purpose of Instrument: As an educational tool, the self-assessment phase helps the student narrow job titles to those that might best match personal needs. The process emphasizes job awareness and explorations.

Title of Subcomponents: Not available.

Types of Scores: Raw scores (number of matches).

Scoring Information: Hand scoring by counselee. Time required for scoring: 20 minutes.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1978 **Date of Most Recent Manual:** 1978

Publisher: CFKR Career Materials, Inc., 110 Glenor Way, P. O. Box 5096, Belmont, CA 94002.

Comments:

Source of Information: Jacobson in Kapes, J. and Mastie, M. (1982).

KUDER CAREER DEVELOPMENT INVENTORY

F. Kuder & E. Diamond

Target Population: Grades 9-10, adults, and out-of-school youth.

Norm Groups: Kuder DD Criterion Group.

Purpose of Instrument: Indicate possible career paths, explore in six broad interest areas, explore at three entry levels.

Title of Subcomponents: Personal data form, and Kuder Career Interest Survey; Technical/Mechanical/Skilled, Scientific/Theoretical, Artistic/Literary/Musical, Persuasive/Managerial, Clerical/Computational, Academic Level of Interest.

Types of Scores: High, moderate and low interests.

Scoring Information: Machine scored. Five working days plus mail time.

Validity: No predictive validity studies.

Reliability: Reliability over time not given; homogeneity is good.

Copyright: 1975 **Date of Most Recent Manual:** 1977

Publisher: SRA.

Comments: Time: 60-75 minutes. This instrument can be used alone but is part of a comprehensive career guidance system. This instrument includes the Kuder Career Interest Survey (KCIS) which is identical to the Kuder Form DD Occupational Interest Survey (KOIS-DD) plus 46 biodata items but scored for six occupational clusters. User must also buy the KOIS-DD manual.

Source of Information: Kapes, J. & Mastie, M. (1982); 8th MMYB.

LIFE CENTERED CAREER EDUCATION INVENTORY

Donn Brolin

Target Population: 7-12 Educable Mentally Handicapped and Specific Learning Disabled Students.

Norm Groups: Not yet determined.

Purpose: Access knowledge of Life Centered Career Education Subcompetencies. (A second instrument will assess performance of the Life Centered Career Education Subcompetencies).

Title of Subcomponents: 1. Managing Personal Finances 2. Selecting and Managing a Household 3. Caring for Personal Needs 4. Functioning in Adult Living Situations 5. Buying, Preparing and Consuming Foods 6. Buying and Caring for Clothing 7. Exhibiting Responsible Citizenship 8. Utilizing Recreational Facilities and Engaging in Leisure 9. Getting Around the Community 10. Achieving Self Awareness 11. Achieving Self Confidence 12. Achieving Socially Responsible Behavior 13. Maintaining Good Interpersonal Skills 14. Achieving Independence 15. Achieving Problem Solving Skills 16. Communicating with Others 17. Knowing and Exploring Occupational Possibilities 18. Selecting and Planning Occupational Choices 19. Exhibiting Appropriate Work Habits and Behaviors 20. Seeking, Securing and Maintaining Employment.

Types of Scores: Percentiles, standard scores.

Scoring Information: Hand scored.

Validity: Instrument not yet completed.

Reliability: Instrument not yet completed.

Copyright: Probably 1987 **Date of Most Recent Manual:** 1987.

Publisher: Council of Exceptional Children.

Comments: Administration—Small groups; examiner may read items to students. Administration time is not yet determined.

Source of Information: Communication with Dr. Brolin and staff.

MINNESOTA IMPORTANCE QUESTIONNAIRE

D. J. Weiss, R. V. Dawis, & L. H. Lofquist

Target Population: Ages 16 and above high school students of both sexes.

Norm Groups: Employees and supervisors in 185 occupations.

Purpose of Instrument: Measure 20-21 psychological needs and six underlying values found relevant to work.

Title of Subcomponents: Achievement, Altruism, Autonomy, Comfort, Safety, Status Values. 20 needs such as Security, Social Status, Compensation, Achievement and Recognition.

Types of Scores: Intra-individual adjusted scores.

Scoring Information: Machine scoring. One day plus mail scoring time.

Validity: .48-.60 range; but no predictive studies available.

Reliability: .77-.81 internal; .48-.89 test-retest depending on length of time between test and retest report.

Copyright: 1975 **Date of Most Recent Manual:** 1981

Publisher: Vocational Psychology Research, University of Minnesota, N620 Elliott Hall, 75 East River Road, Minneapolis, MN 55455.

Comments: Time: 30-40 minutes. Questionnaire permits comparison of individual needs with measured work reinforcers. Based on research and conceptual framework of the Minnesota Theory of Work Adjustment. Two formats are available in the 1975 edition. A paired-comparison and a ranked format. The ranked form is preferred by 2/3rds of respondents.

Source of Information: Albright in Kapes, J. & Mastie, D. (1982).

MISSOURI OCCUPATIONAL CARD SORT

R. N. Hansen and J. A. Johnston

Target Population: College students, adults and college-oriented 11-12th graders.

Norm Groups: Not normed.

Purpose of Instrument: Increase range and quality of information about self and specific occupations; expand the range of occupations being considered; encourage further self and career exploration.

Title of Subcomponents: Fifteen occupational titles.

Types of Scores: Informal assessment.

Scoring Information: Not available.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1982 **Date of Most Recent Manual:** 1982

Publisher: Career Planning and Placement Service, 100 Noyes Hall, UMC, Columbia, MO 65211.

Comments: Time - 1 hour administration plus one hour interpretation; contains 90 occupations with 25% requiring a high school diploma or less, and 63% requiring a college degree and 12% requiring postgraduate education. Fifteen occupations in each of Holland's six codes.

Source of Information: Kapes, J. & Mastie, M. (1982); manual.

MISSOURI OCCUPATIONAL PREFERENCE INVENTORY

E. J. Moore and N. C. Gysbers

Target Population: College and high school students, employment training clients.

Norm Groups: Not normed.

Purpose of Instrument: Assist individuals in exploring career options, understanding reasons behind occupational choices, identifying next steps to guide further exploration.

Title of Subcomponents: Holland Codes.

Types of Scores: Holland Codes.

Scoring Information: Hand scoring.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1980 **Date of Most Recent Manual:** 1980; review is fairly positive

Publisher: Human Systems Consultants, Inc., 110 N. 10th Street, Suite 7, Columbia, MO 65201.

Comments: Time - 2 hours; 180 occupations; occupations 1-45 require high school diploma or less; 46-100 training beyond high school; occupations 101-180 require college or postgraduate degree. Number of occupations in each Holland Code is not balanced. Has programmed materials, *Counselor Directed Workbook*, for counselor to use to direct a client through the card sort process. Materials read to the client. Cards have a lot of occupational information.

Source of Information: Kapes, J. & Mastie, M. (1982).

MISSOURI VIEW (VITAL INFORMATION FOR EDUCATION AND WORK)

James H. Grogan, Director

Target Population: Missouri junior-senior high students.

Norm Groups: Not normed.

Purpose of Instrument: Provide students' self-assessed profile and match profile to job requirements, provide occupational information.

Title of Subcomponents: Career Cards, Institution Cards, and Handbooks.

Types of Scores: Not applicable.

Scoring Information: Not available.

Validity: Is not an instrument per se but a system.

Reliability: Informal assessment.

Copyright: Updated yearly **Date of Most Recent Manual:** Content updated each year.

Publisher: Missouri VIEW Program (Missouri Department of Elementary and Secondary Education).

Comments: Cross-referenced to Holland scales. Has accompanying exploration handbook for students in print version. Key to Missouri VIEW is in the use of microfilm aperture cards. Funded by MODESE. Software (for computer) career decision package and information package available. Is an integrated system that can be used for assessment and information. New feature is Search and Learn, a microfiche program.

Source of Information: Missouri VIEW materials.

MY VOCATIONAL SITUATION

John Holland, Denise Daiger, and Paul G. Power

Target Population: Vocationally undecided high school students and adults.

Norm Groups: None - is informal assessment.

Purpose of Instrument: Help student determine which of three variables may be causing career indecision.

Title of Subcomponents: Vocational Identity, Information or Training, and Environmental or Personal Barriers.

Types of Scores: Raw scores.

Scoring Information: Hand scored.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1980 **Date of Most Recent Manual:** 1980

Publisher: Consulting Psychologists Press, Inc.

Comments: Administration: 5-10 minutes. Is a two-page questionnaire.

Source of Information: 9MMY.

NON-SEXIST VOCATIONAL CARD SET

C. R. Dewey

Target Population: High school to adults.

Norm Groups: Not found.

Purpose of Instrument: Explore feelings, values, needs, interests, fears, fantasies, life style preference and the internalized sex, race, or class stereotypes which limit options vocational clients perceive as being open to them.

Title of Subcomponents: Not found.

Types of Scores: Informal assessment.

Scoring Information: Informal assessment.

Validity: Not found; this card sort is similar to a structured interview.

Reliability: Informal assessment.

Copyright: 1974 **Date of Most Recent Manual:** 1976.

Publisher: NSVCS, Route 4, Box 217, Gainesville, FL 32601.

Comments: Time: 2 hours: 76 occupations: 12% require high school diploma or less; 23% require training beyond high school; 45% require college degree and 20% require postgraduate education. Number of occupations in each Holland Code are not balanced. Author attempts to counteract sex bias.

Source of Information: Dolliver in Kapes, J., & Mastie, M. (1982).

OCC-U-SORT

L. K. Jones

Target Population: Junior-senior high, college, adults.

Norm Groups: Not found.

Purpose of Instrument: Stimulate career exploration; assist in the process of making decisions about occupations; stimulate thought about motives for choosing occupations; sharpen self-perception of career needs; broaden career options; provide framework for understanding world of work.

Title of Subcomponents: Not available.

Types of Scores: Three letter Holland codes.

Scoring Information: Counselee, Counselor.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1981; plus 3, 4, & 5 level **Date of Most Recent Manual:** 1981-manual review is positive.

Publisher: Publishers Test Service & CTB/McGraw Hill.

Comments: Administration: one hour; 3 distinct sets of 60 cards each for a total of 116 occupations. The "plus 3", etc., levels refer to GED levels but he "plus" means higher levels of occupations are also included. Number of Holland codes is balanced in each set.

Source of Information: Kapes, J. & Mastie, M. (1982).

PAYES - PROGRAM FOR ASSESSING YOUTH EMPLOYMENT SKILLS

Target Population: Adolescents and young adults with low verbal skills.

Norm Groups: 1,300 persons ages 14-30 with average of age 18 enrolled in vocational education special needs classes, CETA centers, skill training centers, and correctional institutions throughout the country.

Purpose of Instrument: Assess youth employability skills.

Title of Subcomponents: Job Holding Skills, Attitude Toward Supervision, Self-Confidence, Job Knowledge, Job Seeking Skills, Practical Reasoning, Vocational Interests.

Types of Scores: Summary of item ratings.

Scoring Information: Hand scored.

Validity: Significant, but low, correlations between scores and teachers/counselor/supervisor ratings.

Reliability: .59-.76 internal consistency.

Copyright: 1979. **Date of Most Recent Manual:** Not given.

Publisher: Cambridge Book Company, 888 Seventh Avenue, New York, NY 10106.

Comments: Pictures help clarify many of the questions; reported to be low verbal; is administered orally and respondents mark their answers in a test book. Group administered. Users must be approved by Educational Testing Service.

Source of Information: PAYES User's Guide.

PERSONNEL TEST FOR INDUSTRY - ORAL DIRECTIONS TEST

C. R. Langmuir

Target Population: Persons of low educational levels.

Norm Groups: Applicants and employees for plant and factory jobs, electrical assembly work, police work, and nursing.

Purpose of Instrument: Determine person's ability to understand single or multiple step oral directions.

Title of Subcomponents: Not available.

Types of Scores: Percentile ranks.

Scoring Information: Hand scored using keys.

Validity: .60-.80.

Reliability: .73-.93.

Copyright: 1954, 1974 **Date of Most Recent Manual:** 1974

Publisher: Psychological Corporation.

Comments: Time: 20 minutes; administration is recorded (record, cassette, reel-to-reel). Spanish-American version available. Perhaps useful with students in transition to work.

Source of Information: Botterbusch, C. & Michael, N. (1985).

PLANNING CAREER GOALS

American Institute for Research

Target Population: Grades 8-12.

Norm Groups: 38,000 11th and 12th graders followed up 11 years later.

Purpose of Instrument: Help students make realistic and long lasting educational and career plans. Planning is based on (1) knowledge of one's traits and preferences and (2) comparisons with employed persons in one's preferred career.

Title of Subcomponents: Life and Career Plans Report, Interest Inventory, Information Measures, Ability Measures.

Types of Scores: Percentiles (interest inventory), Stanines (information) Stanines, Percentiles, and Raw Scores (ability).

Scoring Information: Machine scoring $1.16 per student or .76 for interest only. 18 days plus mail time. Hand scoring by counselor, 1 hour.

Validity: Based on Project Talent follow-up data.

Reliability: Not available.

Copyright: 1975, 1976 **Date of Most Recent Manual:** Not given.

Publisher: CTB/McGraw-Hill

Comments: Time: 4 hours, 45 minutes. Instrument based on gifted students.

Source of Information: Super in Kapes, J. & Mastie, M. (1982). 8MMYB.

SELF-DESCRIPTIVE INVENTORY

Target Population: Grade 9-Adult.

Norm Groups: Age norms by sex (teenage, young adult, and middle age) year of norms not found.

Purpose of Instrument: Relates personality and vocationally oriented temperament and dimensions to career choice.

Title of Subcomponents: 11 personality scales such as Reserved/Outgoing, and Conventional/Imaginative.

Types of Scores: Not available.

Scoring Information: Scoring service required; takes about two weeks.

Validity: Detailed information presented in manual.

Reliability: .80's-.90's test-retest.

Copyright: 1975, 1977 **Date of Most Recent Manual:** Not given.

Publisher: NCS Interpretive Scoring Systems.

Comments: Self-administered in approximately 20 minutes; 8th grade reading skills. The 11 personality scales are designed to reflect on individual's basic personality dimensions and how they relate to career areas. The vocational oriented scale utilizes Holland's 6 types.

Source of Information: Kapes, J. & Mastie, M. (1982); Botterbusch, C. & Michael, N. (1985).

SOCIAL AND PREVOCATIONAL INFORMATION BATTERY, REVISED

Andrew Halpern, Paul Raffeld, Larry Irvin, Robert Link, and Ardan Munkres

Target Population: Mild and trainable retarded junior and senior high students.

Norm Groups: 453 junior and 453 senior high school EMR students in Oregon, collected in the early 1970's.

Purpose of Instrument: Assess students for employability, economic self-sufficiency, family living, personal habits and communication.

Title of Subcomponents: Job Search Skills, Job-Related Behavior, Banking, Budgeting, Functional Communication, Purchasing, Home Management, Physical Health Care, Hygiene and Grooming.

Types of Scores: Not given.

Scoring Information: Hand scoring.

Validity: .78-.88 predictive validity.

Reliability: .93-.94 internal consistency; .62-.94 test-retest.

Copyright: 1975, 1979, 1985 **Date of Most Recent Manual:** 1985

Publisher: CTB/McGraw Hill.

Comments: Group or individual administration, administered orally, while students mark T or F. Form T is for TMR students and was published in 1979. 1975 edition pictures reported to be outdated.

Source of Information: Botterbusch, C. & Michael, N. (1985).

TEMPERAMENT AND VALUES INVENTORY (TVI)

Charles Johansson and Patricia Webber

Target Population: Grades 9 and over.
Norm Groups: 1,258 high school and college students.
Purpose of Instrument: Measure work-related dimensions of temperament and reward values.
Title of Subcomponents: 14 temperament and 7 reward value scales.
Types of Scores: Not available.
Scoring Information: Machine scored.
Validity: .80 internal consistency for content validity.
Reliability: Little data.
Copyright: 1977 **Date of Most Recent Manual:** Not available.
Publisher: NCS Interpretive Scoring Systems, P. O. Box 1416, Minneapolis, MN 55440.
Comments: Time: 20-30 minutes; 8th grade reading level.
Source of Information: 8MMY & Keyser, D. & Sweetland, R., V. 1, (1984).

TEST OF INTERPERSONAL COMPETENCE FOR EMPLOYMENT

G. Foss, D. Chaney, & M. Bullis

Target Population: Mentally retarded.
Norm Groups: 206 mildly retarded adolescents and adults in Oregon and Canada (average age of 19.4 years and IQ of 63.5).
Purpose of Instrument: Assess social skills needed in employment.
Title of Subcomponents: Supervisor and Co-Worker.
Types of Scores: No information.
Scoring Information: Hand scoring.
Validity: No data; content validity should be strong due to procedure used to construct test.
Reliability: .79 and .86 internal consistency; test-retest .81-.85 over two week period.
Copyright: 1983 **Date of Most Recent Manual:** 1983
Publisher: James Stanfield Publishing Co.
Comments: Time: information not available. The TICE has 31 multiple choice items in supervisor subtest and 30 in co-worker subtest.
Source of Information: Foss, G., Bullis, M. & Vilhauer, D. in Halpern, A. & Fuhrer, M.

VOCATIONAL INTEREST, EXPERIENCE & SKILL ASSESSMENT

Target Population: Grades 8-12.

Norm Groups: Subgroup drawn from nationally representative sample of 32,000 8th, 9th, and 11th graders in 200 schools.

Purpose of Instrument: Expand self-awareness, identify personally relevant career options, and begin the difficult task of exploring and evaluating their career options.

Title of Subcomponents: Unisex Edition of the ACT Interest Inventory, Career-Related Experience Inventory, Self-ratings of Skills: each reports results for data, ideas, people, and things work tasks.

Types of Scores: World-of-Work Map "region" (standard) scores; quartiles.

Scoring Information: Hand scoring. Scored by: counselee; counselor.

Validity: Correlation of Unisex Edition of the ACT Interest Inventory with Holland categories is .72-.81. No other data.

Reliability: Career Log: .75-.81 split half; no other data.

Copyright: 1976 **Date of Most Recent Manual:** 1976

Publisher: The Riverside Publishing Co.

Comments: Time required for scoring: Included in 40-45 minutes assessment estimate. Marketed as a process rather than assessment per se.

Source of Information: Read in Kapes, J., and Mastie, M. (1982).

WIDE RANGE INTEREST-OPINION TEST

Joseph and Sarah Jastak

Target Population: Age five through adults.

Norm Groups: Ages 5-7, 8-11, 12-15, 16-19, 20-24, 25-34, and 35 and up, male and female.

Purpose of Instrument: Determine interests and attitudes of individuals regardless of age, sex, mental ability, cultural background or educational level.

Title of Subcomponents: Eighteen interest clusters and eight attitude clusters.

Types of Scores: Raw scores and standard scores.

Scoring Information: Machine scoring service; cost per counselee of basic service: contact Interpretive Scoring Services. Handscoring: scored by clerk. Time required for hand scoring: 20 minutes.

Validity: No information.

Reliability: .82 and above split half for 300 people.

Copyright: 1979 **Date of Most Recent Manual:** 1979

Publisher: Jastak Associates, Inc.

Comments: Does not require reading or language understanding. Usefulness is questionable due to psychometric inadequacies.

Source of Information: Zytowski in Kapes, J. & Mastie, M. (1982).

WORK VALUES INVENTORY

D. E. Super

Target Population: Grades 7-12, college and adult.

Norm Groups: Sex and grade for each of grades 7-12.

Purpose of Instrument: Measure satisfaction which people seek in work and satisfactions which may accompany the outcomes of work.

Title of Subcomponents: Altruism, Esthetics, Creativity, Intellectual Stimulation, Independence, Achievement, Prestige, Management, Economic Returns, Society, Surroundings, Supervisory Relations, Associates, Variety, Way of Life.

Types of Scores: Raw scores, percentiles.

Scoring Information: Hand scoring by clerk or counselor, 5-10 minutes.

Validity: "Data suggest that the values constructs sought have been reasonably approximated in the scale, that the items in each scale have content validity and that the inventory offers concurrent results with outside criteria in accord with expectations, although results are usually not startlingly different from chance, merely statistically so."

Reliability: .74-.88 for two-week intervals for high school sophomores.

Copyright: 1968. **Date of Most Recent Manual:** 1970.

Publisher: The Riverside Publishing Co.

Cost of Materials: $1.62 Specimen Set.

Comments: 15-25 minutes; is a self-report inventory. Inventory checks out favorably in a number of ways including carefully developed norms.

Source of Information: Tiedeman, D., in Kapes, J. & Mastie, M. (1982).

WORLD OF WORK INVENTORY

R. E. Ripley

Target Population: Grade 8 thru adult.

Norm Groups: Sex, age 14-65, and educational level 8-17 but only 738 total sample size.

Purpose of Instrument: Vocational exploration and development.

Title of Subcomponents: Career Interests Activities, Job Satisfaction Indicators (Temperament), Vocational Training Potentials (Aptitude Achievement Section).

Types of Scores: Raw scores.

Scoring Information: Machine scoring, 7-10 days.

Validity: Little data. Correlations between each comparison of the 3 sections are low enough to indicate they are measuring different attributes. Scales are closely related to DOT.

Reliability: Split half. .81-.94 for career interests, .89 - .94 for vocational training potential, no information on test-retest.

Copyright: 1977. **Date of Most Recent Manual:** Interpretation Manual, 1979, Administration Manual, 1980.

Publisher: World of Work, Inc.

Comments: Time 2 1/2 hours; Spanish version is El Mundo Del Trabajo. Reading level (English version) reported to be 6th grade. Manual suggests use in vocational rehabilitation, correctional counseling, employment placement and career counseling with mature adults. Probably useful for persons with less than high school education.

Source of Information: Locke, D. in Kapes, J. & Mastie, M. (1982).

Intelligence

Intellectual assessment provides an estimate of students general level of potential or capacity. Knowing general ability of a student is helpful for planning with the student and the family. Group intelligence tests are administered in many schools to all students unless policy exists to exclude certain ones such as those labelled mentally or severely orthopedically handicapped. Results from group tests are often valid for the majority of the students. Validity must be questioned when the student has a handicapping condition such as reading or a culturally different background that interferes with performance under timed conditions. For this reason, both disadvantaged and handicapped students should be assessed on intelligence tests designed for individual administration if the results are to indicate their upper limits of ability.

Not all disadvantaged or handicapped students need to be administered intelligence tests. Rather, they should be administered when intellectual ability is suspected as being part of a student's problem. Also, a student suspected of being learning disabled should be administered an intelligence test to obtain discrepancies between ability and achievement (Missouri Department of Elementary and Secondary Education, no date).

When assessment results are to be used for placement purposes, comprehensive assessment instruments such as the Stanford Binet, one of the Wechsler Scales, or the Kaufman Assessment Battery for Children should be used. Instruments such as the Revised Beta and the Slossan are generally considered inadequate for diagnostic and placement purposes. When one's disability interferes substantially with performance, the assessment specialist will need to check the use of special comprehensive tests such as the Hiskey-Nebraska Test of Learning Aptitudes.

Intelligence test results should be used as only one measure of intelligence. Other things to be considered are past and present performance in school and non-school activities. Also, persons using intelligence results should be aware that scores from two different tests are not readily comparable as different aspects of intelligence are measured in each instrument and the results have been standardized on different populations. Cultural conditions may have a major effect on test scores, especially if the test is heavily oriented to verbal items. One further caution is that a student who is required to be tested for intelligence should be tested at least every three years. The student may have changed and the original assessment may have contained error.

The most commonly known intelligence tests used in the United States are reviewed in the following pages.

HAPTIC INTELLIGENCE SCALE FOR ADULT BLIND

Target Population: Blind and partially sighted adults.

Norm Groups: White and nonwhite visually impaired (5/200 in better eye) from the four geographic regions of the United States.

Purpose of Instrument: To assess performance type intelligence through use of tactile approach.

Titles of Subcomponents: Digit Symbol, Object Assembly, Block Design, Plan of Search, Object Completion, Pattern Board, Bead Arithmetic.

Types of Scores: Raw scores, percentile, and IQ.

Scoring Information: Very similar to WAIS.

Validity: .65 with WAIS verbal.

Reliability: .70-.81 test retest after six months for subtests and .91 for total.

Copyright: 1964. **Date of Most Recent Manual:** Not given.

Publisher: Stoelting Company.

Comments: Time 90-120 minutes. Individual test. Test is modified version of WAIS performance and is to be used with the verbal subscale of the WAIS. The standardization procedure replicated method which Wechsler used.

Source of Information: 7MMY.

HISKEY-NEBRASKA TEST OF LEARNING APTITUDES

Target Population: Persons who are deaf, hard of hearing, or have speech and language problems.

Norm Groups: Fairly large and broadly representative populations for pantomime, deaf, or hearing samples.

Purpose of Instrument: To assess general intelligence without using oral instructions.

Title of Subcomponents: Not applicable.

Types of Scores: General IQ score based on age, like the Stanford-Binet.

Scoring Information: Hand scoring. Administration and scoring must be completed by a trained psychologist or psychological examiner.

Validity: .70-.90 with Stanford-Binet, WISC, Leiter, and others.

Reliability: .90 split half.

Copyright: 1947, 1966 **Date of Most Recent Manual:** 1966

Publisher: Hiskey-Nebraska Test, 5640 Baldwin, Lincoln, NE 68507.

Comments: Time: 50-60 minutes, individually administered. Personnel from deaf community contend that the concepts are verbal in nature and, hence, penalize deaf individuals just as WISC-R, WAIS-R, and Stanford-Binet do. May be used with mentally retarded, speech handicapped and bilingual according to resources.

Source of Information: Bolton in 8MMY.

KAUFMAN ASSESSMENT BATTERY FOR CHILDREN (K-ABC)

Target Population: School age children.

Norm Groups: 2,000 children, 100 at 1/2 year between 2.6 and 12.5 stratified for region, race, or ethnic groups, etc., 2 1/2 to 12 1/2-year old-child.

Purpose of Instrument: Assessment of intelligence and achievement.

Titles of Subcomponents: 16 subtests (children given 13), Sequential Processing, Simultaneous Processing, Achievement.

Types of Scores: Standard scores. Percentiles, age equivalents, score comparison to other social groups, raw scores and global scores.

Scoring Information: Hand scored.

Validity: Good evidence of construct validity and predictive validity.

Reliability: .89 to .97.

Copyright: 1983. **Date of Most Recent Manual:** 1983.

Publisher: American Guidance Service, Inc.

Comments: Individual test; developed by two people with a long history of work in intelligence testing.

Source of Information: K-ABC Sampler Manual.

LEITER INTERNATIONAL PERFORMANCE SCALE

Target Population: Nonvocal/nonverbal clients.

Norm Groups: Ages two to adults.

Purpose of Instrument: To assess intellectual functioning through performance items.

Title of Subcomponents: None.

Types of Scores: Mental age and IQ.

Scoring Information: Student matches card to frame. Hand scoring.

Validity: .65 to .80 when compared to Stanford Binet scores.

Reliability: .90.

Copyright: 1948. **Date of Most Recent Manual:** Not given.

Publisher: C. H. Stoelting.

Comments: Items presented through a nonverbal medium. Objects drawn from U. S. culture. Dunn states some pictures are outdated. No time limits are involved.

Source of Information: Freeman, F.(1962); Dunn, B., Boyles, C., & Fletcher, L. (1984).

RAVENS PROGRESSIVE MATRICES

Target Population: Nonverbal students and adults.

Norm Groups: Ages 5-65, British children and adults (see specific set in series for appropriate age groups).

Purpose of Instrument: Assess mental ability nonverbally.

Title of Subcomponents: No components.

Types of Scores: IQ total.

Scoring Information: Hand scored with keys.

Validity: Correlates well with comprehensive intelligence tests.

Reliability: Information not available.

Copyright: 1938-77 **Date of Most Recent Manual:** 1977

Publisher: Distributed by Psychological Corporation.

Comments: Time: about 45 minutes. Series of matrices: Standard, Colored and Advanced. Use when test with American norms are not available or student cannot be measured by them.

Source of Information: Psychological Corporation catalog.

REVISED BETA EXAMINATION - SECOND EDITION (BETA II)

Target Population: Low verbal students and adults.

Norm Groups: General population.

Purpose of Instrument: Assess intellectual ability without requiring examinees to read.

Title of Subcomponents: Mazes, Coding, Paper Form Boards, Picture Completion, Clerical Checking, and Picture Absurdities.

Types of Scores: Percentile ranks and deviation IQ.

Scoring Information: Hand scoring.

Validity: Not available.

Reliability: Test-retest, .75 and .81 on earlier editions.

Copyright: 1974, 1978 **Date of Most Recent Manual:** Not available

Publisher: Psychological Corporation.

Comments: Time to complete: 30 minutes. Spanish directions are available; useful in screening unskilled workers.

Source of Information: Psychological Corporation Catalog and 6MMY.

SLOSSON INTELLIGENCE TEST

Richard L. Slosson

Target Population: General population.
Norm Groups: Ages 2-adult.
Purpose of Instrument: To obtain a quick, accurate IQ estimate.
Title of Subcomponents: None.
Types of Scores: A single IQ score.
Scoring Information: Hand scored.
Validity: .60-.96 with Stanford-Binet.
Reliability: Test-retest .97.
Copyright: 1981. **Date of Most Recent Manual:** Not given.
Publisher: Slosson Educational Publishers, Inc., 140 Pine Street, East Aurora, NY 14052.
Comments: Time 10-20 minutes. Individually administered. Highly verbal - is best used for an estimate but not for an evaluation. Used for screening more effectively than for diagnosis.
Source of Information: Dunn, B., Boyles, C., & Fletcher, L. (1984) & Academic Therapy Publications 1983-84 catalog.

STANFORD-BINET

Target Population: Ages 2-adult.
Norm Groups: 1972 norms - national stratified sample.
Purpose of Instrument: Assess general intelligence.
Title of Subcomponents: Not appropriate.
Types of Scores: Deviation IQ on recent revisions.
Scoring Information: Hand scored requiring special training.
Validity: Excellent predictor of school success.
Reliability: High.
Copyright: 1916-1973 **Date of Most Recent Manual:** 1973
Publisher: Houghton-Mifflin.
Comments: Individually administered in 1.5 hours.
Source of Information: Friedes, D. (1982) In 7MMY.

TEST OF NONVERBAL INTELLIGENCE

Linda Brown, Rita J. Sherbenon, and Susan Dollar

Target Population: Age 5-Adult handicapped and minority populations.

Norm Groups: 1,929 persons in 28 states representing a stratified sample.

Purpose of Instrument: Measure ability through use of problem solving with abstract content.

Title of Subcomponents: None.

Types of Scores: Quotients and percentiles.

Scoring Information: Hand scoring.

Validity: Correlations when compared to measures of intelligence, aptitude, and achievement range .46-.95.

Reliability: .80-.90.

Copyright: 1982 **Date of Most Recent Manual:** 1982

Publisher: CTB/McGraw Hill.

Comments: Individual or small group (up to 5) administration in about 20 minutes. Administrator pantomimes the instructions and subject points to correct response. This test represents one of the best technically of intelligence tests designed for nonverbal students and adults.

Source of Information: CTB catalog; Harrington, R., in Keyser, D. & R. V. 2, (1984).

WECHSLER ADULT INTELLIGENCE SCALE - REVISED

David Wechsler

Target Population: Ages 16-74.

Norm Groups: National stratified sample.

Purpose of Instrument: Assess global intelligence.

Title of Subcomponents: Information, Digit Span, Vocabulary, Arithmetic, Comprehension, Similarities, Picture Completion, Picture Arrangement, Block Design, Object Assembly, Digit Symbol.

Types of Scores: Deviation IQ's for Verbal, Performance and Full-Scale Scores.

Scoring Information: Hand scoring by specially trained examiners.

Validity: High.

Reliability: High.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: Psychological Corp.

Comments: Time: approximately 75 minutes, individually administered.

Source of Information: Dunn, B., Boyles, C., & Fletcher, L. (1984).

WECHSLER INTELLIGENCE SCALE FOR CHILDREN - REVISED

David Wechsler

Target Population: Children ages 6-16.

Norm Groups: National norms based on ages 6-17.

Purpose of Instrument: To assess intellectual functioning.

Title of Subcomponents: Information, Similarities, Arithmetic, Vocabulary, Comprehension, Digit Span, Picture Completion, Picture Arrangement, Block Design, Object Assembly, coding (mazes) and Mazes.

Types of Scores: full scale, verbal and performance scaled deviation IQ scores.

Scoring Information: Special training is necessary as administrator must make judgements about responses.

Validity: .70 to .95.

Reliability: .95.

Copyright: 1974 **Date of Most Recent Manual:** Not given.

Publisher: Psychological Corp.

Comments: Carefully constructed, is a comprehensive measure, utilizes 10 factors to assess intelligence (with two alternate factors).

Source of Information: Dunn, B. Boyles, C., & Fletcher, L. (1984).

WECHSLER PRESCHOOL AND PRIMARY SCALE OF INTELLIGENCE

David Wechsler

Target Population: Ages 4-6.5

Norm Groups: Stratified Sample for each 6 month intervals of chronological age.

Purpose of Instrument: Assess global intelligence of young school-age children.

Title of Subcomponents: Information, Vocabulary, Arithmetic, Similarities, Comprehension, (Sentences), Animal House, Picture Completion, Mazes, Geometric Design, Block Design.

Types of Scores: Deviation IQ scores for Verbal, Performance, and Full Scale Scores.

Scoring Information: Hand scoring by specially trained examiners.

Validity: Good for age group.

Reliability: Good for age group.

Copyright: 1963, 1967 **Date of Most Recent Manual:** Not given.

Publisher: Psychological Corp.

Comments: Administration time is approximately 1 hour. Test useful for students who cannot be assessed by WISC-R. This age group is not highly reliable in their performance. Individually administered.

Source of Information: Freeman, B. (1985). In 9MMY.

Interests

At least six issues regarding the assessment of interests merit consideration. These are an adequate experience base of students such as that obtained from community exposure and career education, stated preferences, measured preference, manifest interest, finding appropriate instruments to measure preferences, and relationship of interests and abilities.

Adequate Experience

Special education and disadvantaged students often have a restricted view of life due to family and teacher protection, inadequate means of communication, other disability related factors and poor mobility. Family members and teachers may assume that students with handicapping conditions cannot perform certain daily living, academic, social or vocational skills simply because of the handicapping condition. The person who is unable to communicate verbally or who is unable to transport him/herself by private vehicle or public transportation needs special training to know what the environment is like. Students may underestimate their capabilities because of their experiences. As a result, they do not know if they like or dislike doing any number of activities. If school staff do not seek to provide compensatory experiences, students may not know how to react to questions about interests. Such experiences may need to be provided about work, leisure activities, community participation or other areas. In the area of work, Alper and Choisser (1981) suggest that job experiences be provided before the student is asked to express a job preference. Job samples and visits to observe persons working are two ways of providing experiences. Rudrud, et al, (1982) designed a slide-tape presentation depicting four job opportunities in the community. Their results indicate a substantial increase in knowledge after severely handicapped students viewed this presentation and over fifty percent of the students "indicated a clear change" in their choice of work.

Stated Interests

Asking the student what his/her interests are is an important part of assessment. Some students know and will be able to answer at a young age. Many students, however, do not know their interests. Related to this is the question of stability of interests. Interests tend to change as a result of age: interests of younger people fluctuate significantly whereas adult interests tend to be relatively stable (Thorndike and Hagan, 1977). With children and adolescents, interests may be transient and based on new experiences until age seventeen or older.

Measured Interests

Measuring student preferences is usually a matter of having a student rate him/herself in relationship to some group of persons. The instruments rarely qualify as tests. Results should be treated as subjective ratings rather than as test data. Reliability and validity of results should never be assumed as results are easily skewed to reflect the way the student wants them to be or the way he/she believes an authority figure expects them to be answered (Thorndike and Hagen, 1977). Results are most reliable when a student wants to discover his/her own interests.

Additional issues are involved in measuring students with learning problems, especially language difficulty. Several authors of interests inventories (Lustig, 1982; Ferrara, Rudrud, Wendlegass, and Markve, 1985) have substituted or combined pictures with words. Some are designed specifically for the developmentally disabled while others are for all persons with poor reading skills. Such inventories are sometimes based on a restricted labor market, i.e., jobs held by developmentally disabled and illiterate workers. This presents a two-fold problem: a) restriction of items/pictures the student is to respond to and b) future workers will be restricted to those same jobs. Persons are restricted by the limited choices as well as his/her own limited background. Such restricted inventories rarely picture an adequate conception of the world of work (Lustig, 1982).

Quality of the pictures is a further problem. Rudrud, et al, (1982) reports that clients may respond on the basis of color in the picture or on misconceptions about jobs. Some pictures fail to show clearly identifiable work functions and responses may be based on fantasy or projection (Lustig, 1982). Also, the jobs pictured may not exist in the student's locale.

Manifest Interests

Manifest interest is defined as what students do given free time and no constraints as people tend to do the things they like best. Manifest interests should be measured by observation and by counting the frequency of occurrence of specific behaviors.

Finding Appropriate Instruments

Staff members should pay close attention to the purpose for which a particular inventory was developed. For example, the Strong-Campbell was designed to measure interests in jobs requiring college training even though the reading level is reported to be near sixth grade. Reading levels may not be the most important variable to use in assessing the value of the instrument. In this case, the purpose for which the instrument was designed is to help students compare their responses to people in various white collar fields (even the farmer scale on this instrument is a white collar or gentleman farmer).

Sex role bias continues to exist with many interest inventories. Since these inventories help students assess themselves, sex role stereotypes may be promoted in the inventories and may offset training provided to reduce sexism in the work force.

Check validity and reliability studies carefully on interest inventories. Already discussed are the issues of student faking results, of inventories representing an accurate conception of work, and the adequacy of the students' responses. These factors all affect validity and reliability.

Relationship of Interests and Abilities

Research indicates that the relationship between interests and abilities is relatively small. It is necessary to determine interests and abilities separately. The guidance specialist should help the student find a field in which he/she has both interests and abilities.

Conclusion

Interest assessment in the school should be a dynamic rather than a static process. The value of interest inventories for disadvantaged and handicapped students is in their ability to cause the student to think about his/her preference and to promote planning. The majority of the students interests are still developing through the high school years and may continue to develop through postsecondary training. Slower development occurs more often when adequate career education and assessment have not been completed. Interest inventories are one tool to use but should always be used in conjunction with other indicators of interests. They should help the student in planning his/her next step and are most valid when the student wishes to know him/herself.

A large number of reviews of interest inventories follows. Each instrument should be examined thoroughly before using it with students and adults.

CALIFORNIA OCCUPATIONAL PREFERENCE SYSTEM

R. & L. Knapp

Target Population: Middle-high school, college and adults.

Norm Groups: Junior high, high school, and college but no information regarding these students.

Purpose of Instrument: Career decision-making.

Title of Subcomponents: Science, Consumer Economics, Outdoor, Business, Clerical, Communication, Arts, Service, Technology.

Types of Scores: Raw scores and percentiles.

Scoring Information: Hand scored in 5-10 minutes; or machine scoring .85 cents per student, allow 10 days plus mail time.

Validity: Little information.

Reliability: Similar to OVIS and Jackson.

Copyright: 1975. **Date of Most Recent Manual:** 1981.

Publisher: EDITS.

Comments: Time: 30-55 minutes. Inventory geared to DOT and Occupational Outlook Handbook.

Source of Information: Jo-Ida C. Hansen in Kapes, J. & Mastie, M., (1982).

CAREER ASSESSMENT INVENTORY

C. B. Johanson

Target Population: 8th grade through adults.

Norm Groups: Two norm groups: 1) people in occupational groups, and (2) the general population.

Purpose of Instrument: Career decisions requiring a minimum of post-secondary training. It compares student interests with those of workers in occupations requiring less than a four-year college education.

Title of Subcomponents: Six general occupational theme scales, 22 basic interest scales, and 89 occupational scales. Administrative indices and four non-occupational scales.

Types of Scores: Standard scores.

Scoring Information: Machine scoring service.

Validity: No information.

Reliability: .90 test-retest.

Copyright: Approx. 1978 **Date of Most Recent Manual:** 1978

Publisher: NCS Interpretive Scoring.

Comments: Time: 40 minutes. Test booklet looks much like the Strong-Campbell.

Source of Information: Lohnes in Kapes, J. & Mastie, M., (1982).

CAREER GUIDANCE INVENTORY

Target Population: Grades 7-13 interested in trades, services and technologies.

Norm Groups: Not normed.

Purpose of Instrument: Designed for counseling students with interests in trades, services, and technologies.

Title of Subcomponents: 25 scores.

Types of Scores: Descriptive such as very low to very high.

Scoring Information: Not available.

Validity: No data found.

Reliability: Split half - .87 for 100 junior college students in terminal degree programs.

Copyright: 1972 **Date of Most Recent Manual:** Not found.

Publisher: Educational Guidance, Inc.

Comments: Administration time not reported but may take up to 2 hours. Technically inadequate scale.

Source of Information: Kapes, J. & Mastie, M. (1982); MMY8:996.

GEIST PICTURE INTEREST INVENTORY

Harold Geist

Target Population: Grades 8-16 and adults.

Norm Groups: Several small groups from the mainland, Puerto Rico, and Hawaii.

Purpose of Instrument: Assess vocational interests of low and non-readers.

Title of Subcomponents: Persuasive, Clerical, Mechanical, Musical, Scientific, Outdoor, Literary, Computational, Artistic, Social Service, Dramatical, Personal Service (females only), Family, Prestige, Financial, Intrinsic and Personality, Environmental, Past Experience, Could Not Say.

Types of Scores: T scores.

Scoring Information: Hand or machine scored.

Validity: Very questionable.

Reliability: Questionable.

Copyright: 1959-71 **Date of Most Recent Manual:** Not found.

Publisher: Western Psychological Services.

Comments: Has male and female versions (personal service for females only). Has verbal instructions. Some pictures are very ambiguous. Separate male and female norms may cause compliance problems with Title IX. Also, deaf form is available.

Source of Information: 6MMY.

GORDON OCCUPATIONAL CHECKLIST II

Target Population: Grades 8-12 and adults.

Norm Groups: Not norm-referenced.

Purpose of Instrument: Basis for counseling regarding career decisions where college training is not needed.

Title of Subcomponents: Business, Arts, Outdoors, Technology-Mechanical, Technology-Industrial, Service.

Types of Scores: No information.

Scoring Information: Hand scoring. Reports five scores (business, outdoor, arts, technology, service) and 30 smaller interest clusters. Content covers 240 jobs not requiring college training.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1961-81 **Date of Most Recent Manual:** 1981

Publisher: The Psychological Corporation

Comments: Time: 20-25 minutes.

Source of Information: Kapes, J. & Mastie, M. (1982).

HALL OCCUPATIONAL INTEREST INVENTORY

Lacy Hall and Randolph Tarrier

Target Population: Grades 3-Adult.

Norm Groups: Not available. Reportedly is a teaching process in test format rather than being a test or inventory.

Purpose of Instrument: Assess values and needs, job characteristics, and worker traits.

Title of Subcomponents: 22 components such as Creativity, Independence, Risk, Information, Belongingness, Security, Aspiration, Esteem, Data, People.

Types of Scores: Not available.

Scoring Information: Self-scored.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1968, 1971, 1976 **Date of Most Recent Manual:** 1976

Publisher: Scholastic Testing Service, Inc.

Comments: Administration time: 30-40 minutes. Based on Maslow and Roe's Need Theory, is correlated to worker traits and job characteristics of the Department of Labor. Also, a career education reader is available. Available for grades 3-7, young adult-college, and adult basic for reading handicapped. More useful for process than prediction.

Source of Information: Catalog and MMY8:1003.

HOW WELL DO YOU KNOW YOUR INTERESTS?

Thomas N. Jenkins

Target Population: High school, college.

Norm Groups: Not available.

Purpose of Instrument: Collect information about students' likes and dislikes of certain jobs, activities, things and people.

Title of Subcomponents: Business, Mechanical, Outdoor, Service, Research, Visual Art, Amusement, Literacy, Music, General Work Attitudes.

Types of Scores:

Scoring Information: Hand scoring. Yields 55 item profile of occupational interest factors to guide the student's career exploration and decision making.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1974 **Date of Most Recent Manual:** Not given.

Publisher: Psychologists and Educators, Inc.

Comments: Untimed, 10 minutes, Group, Examiner Required.

Source of Information: Kapes, J. & Mastie, M. (1982); Sweetland, R. & Keyser, D. (1983).

INTEREST DETERMINATION EXPLORATION AND ASSESSMENT SYSTEM

Target Population: Grades 6-12.

Norm Groups: Students in grades 6-8 and in grades 9-12. Combined sex norms.

Purpose of Instrument: Serves as an introduction to career planning.

Title of Subcomponents: Mechanical/Fixing, Electronics, Nature/Outdoors, Science, Numbers, Writing, Arts/Crafts, Social Service, Child Care, Medical Service, Business, Sales, Office Practices, Food Services.

Types of Scores: Raw and standard scores.

Scoring Information: Provides scores on 14 basic interest scales that help students identify and explore occupational areas of interest. Hand scoring - scored by counselee.

Validity: .91 with Career Assessment Inventory and about .80 with the Strong-Campbell and the Minnesota Vocational Interest Inventory.

Reliability: .80-.90.

Copyright: 1976 **Date of Most Recent Manual:** Is updated every two years.

Publisher: NCS Interpretive Scoring Systems, P. O. Box 1416, Minneapolis, MN 55440.

Comments: Testing and scoring: 40 minutes. IDEAS is a self-contained, self-scorable interest inventory and is a shorter version of the career Assessment Inventory by the same author.

Source of Information: Borman in Kapes, J. & Mastie, M. (1982).

JACKSON VOCATIONAL INTEREST SURVEY

D. N. Jackson

Target Population: High school and adults.

Norm Groups: Random samples of 6,337 high school and 16 college and university groups. 10,134 Pennsylvania State students listed separately for academic program.

Purpose of Instrument: Assist educational and career planning.

Title of Subcomponents: 34 interest scales, 10 general occupational scales.

Types of Scores: Standard scores, percentiles, similarity to college major groups and occupational clusters.

Scoring Information: Hand scoring by counselor under supervision - 10 minutes; machine scoring - allow 2 days plus mail; local machine scoring license for Tandy TRS-80 Model III.

Validity: Clear and substantial relationship with Strong Vocational Interest Blank.

Reliability: .84 - .98 for four types including test-retest.

Copyright: Not available. **Date of Most Recent Manual:** 1977.

Publisher: Research Psychologists Press.

Comments: Time - one hour; items appear to be culturally biased toward middle class and professionally oriented activities; reading level around 7th grade but probably appropriate for college bound only.

Source of Information: Kapes, J., & Mastie, M. (1982).

KUDER GENERAL INTEREST SURVEY - FORM E

F. Kuder

Target Population: Grades 6-8 and 9-12.

Norm Groups: Grades 6-8 and 9-12, males and females.

Purpose of Instrument: Measure broad vocational interests for career exploration, especially at junior high level.

Title of Subcomponents: Outdoor, Mechanical, Computational, Scientific Persuasive, Artistic, Literary, Musical, Social Service, Clerical.

Types of Scores: Percentiles and raw scores.

Scoring Information: Hand score or machine score (buy separate booklets). Hand scoring takes about 10 minutes.

Validity: No predictive validity available.

Reliability: Little data.

Copyright: 1964 **Date of Most Recent Manual:** 1975.

Publisher: Science Research Associates, Inc.

Comments: Time 40-50 minutes; 6th grade reading level. This is a very similar instrument to the old Kuder Preference Record - Form C. Middle class bias may be operating in developing the items. Probably as good an inventory as exists for 6-8th graders and older students who are not considering college. Interpretative materials are very weak.

Source of Information: Kirk & Frank in Kapes, J. & Mastie, M. (1982).

KUDER OCCUPATIONAL INTEREST SURVEY - FORM DD

F. Kuder

Target Population: Grade 11 to adults, mature 10th graders.

Norm Groups: Men and women in specific criterion groups.

Purpose of Instrument: Measure occupational interests for counseling and occupational exploration.

Title of Subcomponents: 126 occupational scales and 48 college major scales.

Types of Scores: Lambda correlations (index of similarity of individual's interests to those of average person in the occupation).

Scoring Information: Machine scored, approximately $2.60 for materials and scoring. Allow 3 days plus mail time.

Validity: Predictive validity good when taken by college student, older secondary students, or when student chooses higher-level scientific or technical field.

Reliability: .90 for short periods; relatively stable over 12 years for college students.

Copyright: 1982 **Date of Most Recent Manual:** 1982

Publisher: SRA.

Comments: Time: approximately 30 minutes; reading level 6th grade. Useful only for college-bound students.

Source of Information: Kapes, J. & Mastie, M. (1982)

OASIS INTEREST SCHEDULE

Target Population: Grades 8-12.

Norm Groups: 1,398 students from eleven states.

Purpose of Instrument: Identify interests.

Title of Subcomponents: Artistic, Scientific, Nature, Protective, Mechanical, Industrial, Business Detail, Selling, Accommodating, Humanitarian, Leading-Influencing, Physical Performing.

Types of Scores: Not given.

Scoring Information: Hand scored.

Validity: Determined by principal component analysis.

Reliability: .84-.94.

Copyright: 1983 **Date of Most Recent Manual:** 1983

Publisher: Pro-Ed.

Comments: Administration: 30-40 minutes. Normed on same sample as OASIS Occupational Aptitude Survey.

Source of Information: Catalog.

PICTURE INTEREST EXPLORATION SURVEY

Elizabeth F. Mahoney

Target Population: Grades 7-12.

Norm Groups: Not given.

Purpose: Assist low readers explore interests

Titles of Subcomponents: Office, Sales, Construction, Mechanics and Repairmen, Agriculture, Industrial Production, Service Education, Transportation Activity, Scientific and Technical, Health, Social Scientists and Social Service, Art Design and Communications.

Types of Scores: Not given.

Scoring Information: Hand scored.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1974 **Date of Most Recent Manual:** 1974

Publisher: Education Achievement Corporation, P.O. Box 7310, Waco, TX 76710.

Comments: Administration 45 minutes to one hour. Uses 156 slides to show workers hands performing occupational tasks.

Source of Information: Kapes & Mastie; MMY 8:1018.

PICTORIAL INVENTORY OF CAREERS-VOCATIONAL

Target Population: Regular and Low-Functional Vocational Students.

Norm Groups: Normed but details aren't available.

Purpose of Instrument: Assess interests for placement.

Title of Subcomponents: Agricultural/Environmental, Business-Data Processing, Retail/Sales, Secretarial, Communications-Art/Graphics, Criminal Justice, Electrical/Electronics, Engineering Technology, Food Services, Health Services, Science & Laboratory, Barber/Cosmetology, Fire Science, Personnel, Construction, Mechanical, Metal Trades.

Types of Scores: Not given.

Scoring Information: Hand or computer scoring.

Validity: Validated with industry—details not available.

Reliability: Data not available.

Copyright: Not available but in 1980's **Date of Most Recent Manual:** Not given but in the 1980's

Publisher: Talent Assessment, Inc.

Comments: Group administered in about 20 minutes. No reading skills needed, Sex fair.

Source of Information: Brochure

READING-FREE VOCATIONAL INTEREST INVENTORY

Ralph O. Becker

Target Population: Moderate and profoundly handicapped students.

Norm Groups: Normed for 3,407 males and 3,006 females with IQ range from 62-69 in both public schools and institutions (1975). 1981 edition has 10 norm groups including L.D.

Purpose: Non-reading instrument may be used to find career interest areas for moderate and some profoundly handicapped individuals; students circle one of three choices in 57 sets.

Title of Subcomponents: Automotive, Building Trades, Clerical, Animal Care, Food Service, Patient Care, Horticulture, Housekeeping, Personal Service, Laundry Service and Materials Handling.

Types of Scores: Raw scores, T scores and percentiles.

Scoring Information: Hand scored.

Validity: .00 - .82 for construct; No predictive validity attempts have been reported.

Reliability: .70 - .80 Test-retest over 2 week interval; .82 for internal.

Copyright: 1975, 1981 **Date of Most Recent Manual:** 1981 or later.

Publisher: Edmark Associates, P.O. Box 3903, Bellevue, WA 98009 and C&B/McGraw Hill.

Comments: 1975 edition has 2 Forms (male and female); administered orally, individually or group with different sets of directions. Title IX compliance requires all scales be provided for both sexes. 1981 edition uses the 4th edition of D.O.T. and 1982 supplement. Separate forms for each sex have been dropped. Manual provides information to access 698 job titles.

Source of Information: 8 MMY, CTB/McGraw Hill catalog.

SELF-DIRECTED SEARCH

J.L. Holland

Target Population: Junior-senior high, college and university students, adults.

Norm Groups: 4,675 high school students; 3,355 college students.

Purpose of Instrument: Counseling tool; provides occupational code to explore appropriate careers.

Title of Subcomponents: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional.

Types of Scores: 3 digit codes (2 digit codes for Form E).

Scoring Information: Hand scored by student if supervised by counselor; five minutes required.

Validity: Construct validity - debatable.

Reliability: Internal consistency - .67-.94 (KR-20's) for 2,000-6,000 college freshmen.

Copyright: 1970; 1979 **Date of Most Recent Manual:** 1979 - (1981 for Spanish and Vietnamese)

Publisher: Consulting Psychologists Press.

Comments: 1) Sex bias - women achieve higher scores in A, S, C probably because of cultural factors, 2) Scoring errors - it is not self-directed but must be counselor-directed.

Source of Information: Kapes, J. & Mastie, M., (1982).

SELF-DIRECTED SEARCH, FORM E

J.L. Holland

Target Population: Fourth grade reading level students and adults.
Norm Groups: No information found.
Purpose of Instrument: Assist in career decision-making.
Title of Subcomponents: Realistic, Investigative, Artistic, Social, Enterprising, Conventional.
Types of Scores: 2 digit codes.
Scoring Information: Similar to regular form.
Validity: No data.
Reliability: No data.
Copyright: 1970, 1973, 1979 **Date of Most Recent Manual:** 1979 & 1981 (Spanish edition, 1981)
Publisher: Consulting Psychology Press, Inc.
Comments: See Self-Directed Search. It appears one has to take Form E based on data of the regular form.
Source of Information: Crites in Kapes, J. & Mastie, M. (1982).

SINGER VOCATIONAL CHOICE INDEX

Target Population: Handicapped and disadvantaged.
Norm Groups: Handicapped and disadvantaged.
Purpose: Identify the vocational interests of people having limited or no work experiences and a 5th - 6th grade reading level.
Title of Subcomponents: Examinees respond to printed statements in 12 major career interest areas (based upon the Guide for Occupational Exploration).
Types of Scores: Not Given.
Scoring Information: Self-scored.
Validity: Informal assessment.
Reliability: Informal assessment.
Copyright: Not available. **Date of Most Recent Manual:** Not available
Publisher: Singer Career Systems.
Comments: May be useful for current interests prior to administering Singer work samples.
Source of Information: Singer materials.

STRONG CAMPBELL INTEREST INVENTORY

E. K. Strong, Jr., D. P. Campbell, and J. C. Hansen

Target Population: Professionally oriented grade eight through adults.

Norm Groups: 300 men and women-in-general reference groups and an average of 248 men and women in 162 occupational criterion groups.

Purpose of Instrument: To measure occupational interests compared to men and women in general and in a wide variety of occupations requiring a college degree or professional training.

Title of Subcomponents: Six occupational themes: Realistic, Artistic, Social, Conventional, Investigative and Enterprising; 23 basic interest scales; 162 occupational scales; Academic Comfort, and Introversion-Extroversion.

Types of Scores: Standard scores plus descriptive labels on general occupational theme and basic interest scales.

Scoring Information: Machine scoring; allow three days plus mail time.

Validity: Excellent.

Reliability: Test-retest over three year period, .81-.87 (median); SE 4-5 points.

Copyright: 1974. **Date of Most Recent Manual:** 1981.

Publisher: Stanford University Press.

Comments: Time: 20-60 minutes. One of the oldest and best interest inventories for professional occupations.

Source of Information: Johnson in Kapes, J. & Mastie, M. (1982).

USES INTEREST INVENTORY

Target Population: Grade 12 and adults.

Norm Groups: Not available.

Purpose of Instrument: Assess interests.

Title of Subcomponents: Artistic, Scientific, Plants and Animals, Protective, Mechanical, Industrial, Business Detail, Selling, Accommodating, Humanitarian, Leading-Influency, Physical Performing.

Types of Scores: Standard scores and percentiles.

Scoring Information: Hand scoring.

Validity: Not available.

Reliability: Not available.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: United States Government Printing Office.

Comments: Used in conjunction with the GATB and is available only to those who are approved to administer the GATB.

Source of Information: Manual.

VOCATIONAL CARD SORT
(Part of Exploration and Insight Kit)

J. L. Holland Associates

Target Population: High school, college, adults.

Norm Groups: Not given.

Purpose of Instrument: Encourage self-exploration and understanding, resolve vocational indecision; clarify advantages of one vocational alternative over another; increase range of options considered.

Title of Subcomponents: Not given.

Types of Scores: Not available but appear to be self-interpreted.

Scoring Information: Not available.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1979 **Date of Most Recent Manual:** 1976. Not really a manual.

Publisher: Consulting Psychologists Press, Inc.

Comments: Time: 2 hours for administration but a total of three-four hours is needed if follow-through is used; includes 84 occupations. 26% require high school diploma or less, 49% college degree; 24% post graduate education. The 84 occupations are balanced between Holland Codes according to first letter (same occupation as in "occupations" section of Self-Directed Search and the 7th revision of Vocational Preference Intervention. Self-administered. Built around Self-Directed Search but is more thorough.

Source of Information: Dolliver in Kapes, J. & Mastie, M. (1982).

VOCATIONAL INTEREST AND SOPHISTICATION ASSESSMENT

J. J. Parnicky

Target Population: Mildly retarded adolescents and young adults.

Norm Groups: Approximately 3,000 subjects with mild retardation sampled in public schools, workshops, and institutions.

Purpose of Instrument: Provides a reading-free picture instrument to obtain a measure of an individual's interest in and knowledge about a series of job options at the unskilled and semi-skilled levels.

Title of Subcomponents: Interest Responses, Sophistication Inquiry.

Types of Scores: Raw scores, percentile and graphic conversion of percentiles.

Scoring Information: Hand scoring.

Validity: Useable data not available.

Reliability: Useable data not available.

Copyright: 1968 **Date of Most Recent Manual:** 1968

Publisher: O.S.U. Nisonger Center, 1580 Cannon Drive, Columbus, OH 43206.

Comments: Actual test time: 30-60 minutes. Psychometric inadequacies and age represent problems in using this inventory.

Source of Information: Domino in Kapes, J. & Mastie, M. (1982).

VOCATIONAL INTEREST INVENTORY (VII)

Patricia W. Lunneborg

Target Population: 11-12th graders planning to attend college.

Norm Groups: 26,000 high school juniors and seniors.

Purpose of Instrument: Career planning.

Title of Subcomponents: Service, Business Contact, Organization, Technical, Outdoor, Science, General Cultural, Arts and Entertainment.

Types of Scores: Percentile and T scores, analysis and discussions of all scores at and above the 75th percentile and college majors.

Scoring Information: Computer scored by publisher; allow mail time plus one day for scoring.

Validity: Longitudinal data provided; considered relatively good.

Reliability: Quite high.

Copyright: 1981 **Date of Most Recent Manual:** 1981

Publisher: Western Psychological Services.

Comments: Individually or group administered in 20 minutes. Is reported to control sex bias at the item level. Based on Anne Roe's theory of needs in career guidance.

Source of Information: Botterbusch, C. & Michael, N. (1985).

VOCATIONAL OPINION INDEX

Target Population: Disadvantaged trainees in vocational skills programs.

Norm Groups: Not available.

Purpose of Instrument: Assess job readiness, posture (attitudes, perceptions, and motivations) as they impact on ability to obtain and maintain jobs.

Title of Subcomponents: Attractions to work, losses associated with work, barriers to employment.

Types of Scores: Not available.

Scoring Information: Score sheet must be prepared locally when hand scored.

Validity: Not available.

Reliability: Not available.

Copyright: 1973-76 **Date of Most Recent Manual:** Not given.

Publisher: Associates for Research in Behavior, Inc.

Comments: Administration time: 45 minutes. Spanish edition available.

Source of Information: MMY8:1056.

VOCATIONAL PREFERENCE INVENTORY, 7TH REVISION

John Holland

Target Population: High school, college and adult.

Norm Groups: 732 college students and adults identified as "accidental".

Purpose of Instrument: Assess personality variables as they relate to occupational choice.

Title of Subcomponents: Realistic, Intellectual, Social Conventional, Enterprising, Artistic, Self-Control, Masculinity, Status, Infrequency, Acquiescence.

Types of Scores: Standard scores.

Scoring Information: Hand scored.

Validity: Moderate validity.

Reliability: Moderate reliability.

Copyright: 1953, 1978 **Date of Most Recent Manual:** 1978

Publisher: Consulting Psychological Press.

Comments: Administration - Self. Requires about 25 minutes. Possibly should be used more as a counseling tool than a predictor of personality or vocational interest.

Source of Information: MMY9:1342.

WHAT I LIKE TO DO

C. E. Meyers

Target Population: Grades 4-7.

Norm Groups: No norms.

Purpose of Instrument: Helps children in the intermediate grades identify interests, curricula and career preferences. Shows interest patterns in play, academics, arts, occupations, and reading.

Title of Subcomponents: Play, Academics, Arts, Occupations.

Types of Scores: Not available.

Scoring Information: Not available.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1970 **Date of Most Recent Manual:** Not given.

Publisher: Science Research Associates, Inc.

Comments: Reading level probably above 4th graders. Psychometrically appears poor. If used, should probably be used for process.

Source of Information: 8MMY.

Learning Styles

Learning is a matter of style according to Gregoric and Butler (1984). Each person has a particular style of learning that he/she is most comfortable in using. The teacher is interested in finding the right way to teach students who have had difficulty in the past. If this right way is to be found, then the instructor needs to know how students approach tasks, processes used, and behaviors they exhibit—their personally preferred way of operating. Learning styles may be identified through:

1. Observation - documenting observations of behavior over a period of time.

2. Personality preference inventories and reading interest inventories - providing cues regarding preference for working alone, working in a group, and preference for reading.

3. Formal test results - providing a profile of strengths and weaknesses that can be related to the means of processing information.

4. Learning style instruments - inventories which students use to rate themselves on various dimensions of learning (West, 1983).

Learning styles involve three major factors: sensory, human interaction, and timing. Sensory factors include hearing, seeing, touching, tasting, and smelling. Within human interaction are preference for frequency of help, passive-active learning, group size, and the communications network. Timing refers to preference for short or long assignments and frequency of assignments (West, 1983).

The learning style inventory reviews that follow reflect the conclusion that learning style instruments are relatively new and many are informal instruments. Many of them will be improved or replaced by better researched instruments as time permits.

C.I.T.E. LEARNING STYLES INSTRUMENT

A. M. Babich, P. Burdine, L. Albright and P. Randal

Target Population: Students.

Norm Groups: Not available.

Purpose of Instrument: Delineate styles of learning.

Title of Subcomponents: Visual Language, Social-Individual, Auditory Numerical, Visual Numerical, Social-Group, Kinesthetic-Tactile, Auditory Language, Expressive-Oral, Expressive-Written.

Types of Scores: Raw scores.

Scoring Information: Hand scored.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: No copyright **Date of Most Recent Manual:** Not given.

Publisher: Murdock Teacher Center, Wichita Public Schools, Wichita, KS.

Comments: Self-rating of each of the 45 statements on a four point scale. This instrument is in public domain.

Source of Information: Knaak, W. (1983).

CHILD RATING FORM

Manuel Ramirez and Alfred Castaneda

Target Population: School age.

Norm Groups: Not available.

Purpose of Instrument: Match and mismatch learning and teaching styles. Goal: encourage personal "bicognitive ability" that reduces favoring one style over another.

Title of Subcomponents: Field Independence/Sensitivity and Cultural differences.

Types of Scores: Not available.

Scoring Information: Observer tallies frequency of behavior.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1974, revised version **Date of Most Recent Manual:** Not given.
in *New Frontiers* by Pergamman Press, Inc.

Publisher: Academic Press (Book: *Cultural Democracy, Biocognitive Development & Education*, 1974).

Comments: A direct observation checklist for teacher of young students and self-observation checklist for older students.

Source of Information: Knaak, W., (1983).

GREGORIC STYLE DELINEATOR

Target Population: Adults.

Norm Groups: Not available.

Purpose: Identify four basic channels through which the mind receives and expresses information.

Title of Subcomponents: Concrete Sequential, Abstract Sequential, Abstract Random, Concrete Random.

Types of Scores: Raw scores.

Scoring Information: Hand scored.

Validity: Three studies by author indicate validity is adequate or better.

Reliability: .85 - .93 alpha coefficients 6 hours to 8 weeks apart.

Copyright: 1982, 1985 **Date of Most Recent Manual:** 1985.

Publisher: Gabriel Systems, Inc., P.O.Box 357, 147 Main Street, Maynard, MA 01754.

Comments: Gregoric states that his Style Delineator is not a learning style instrument *per se* but an adult self assessment instrument designed to increase understanding of selected aspects of their mind. Administration: self.

Source of Information: Pamphlets and personal communication with Anthony F. Gregoric, Ph.D.

INSTRUCTIONAL STYLES INVENTORY

Albert and Judith Canfield

Target Population: Teachers.

Norm Groups: 83 males and females.

Purpose: Determine teaching style preferences.

Title of Subcomponents: Conditions, Content, Mode, Influence.

Types of Scores: Percentiles.

Scoring Information: Hand scored.

Validity: Informal assessment.

Reliability: .81 - .96 Test-retest over one week.

Copyright: 1976 **Date of Most Recent Manual:** 1977.

Publisher: Humanics, Inc., P.O. Box 5277, Northville, MI 48167.

Comments: 25 multiple choice statement categories, each with four statements to be ranked. It may be used with or independent of the Learning Styles Inventory by the same authors. * Validity will be partially determined by teachers knowing their instructional style and preferences and being willing to rank them honestly.

Source of Information: Knaak, W., (1983); MMY9:514.

LEARNING STYLE IDENTIFICATION SCALE

P. Malcolm, W. Lutz, M. Gerken, and G. Hoeltke

Target Population: Grades 1-8.

Norm Groups: One urban and one rural Midwest school district.

Purpose: Identify student's learning style and provide an efficient, practical, step-by-step method of teaching to that style.

Title of Subcomponents: Internal Sources (feelings, beliefs, attitudes) and external (people, events, social institutions).

Types of Scores: T Scores.

Scoring Information: Hand scored.

Validity: Informal assessment. Teachers observe and rate students' behavior.

Reliability: Generally adequate.

Copyright: 1981. **Date of Most Recent Manual:** 1981.

Publisher: CTB/McGraw-Hill

Comments: Administration Time - 10-20 minutes. Caution: Only 60% of the students fall into one of the four categories. The other 40% are labelled style V and are not described but constitute the largest group of students.

Source of Information: MMY9:606.

LEARNING STYLE INVENTORY

Albert and Judy Canfield; J. Canfield and Lafferty

Target Population: Grades 6 through adults.

Norm Groups: 2,000 subjects; separate male and female norms.

Purpose: Identify styles of learning.

Title of Subcomponents: Conditions, Content, Mode, Expectation.

Types of Scores: Not available.

Scoring Information: Hand scored.

Validity: Some studies support validity.

Reliability: .96 Split Half.

Copyright: 1976-1980 **Date of Most Recent Manual:** 1980.

Publisher: Humanics Media/Liberty Drawer 7970, Ann Arbor, MI 48107.

Comments: Administration: 15 minutes. Self-report instrument based on rank ordering of 30 statements. May be used independently or in conjunction with *Instructional Styles Inventory*. Separate sex norms may constitute a problem with Title IX funds.

Source of Information: Knaak, W., (1983); MMY 9:609.

LEARNING STYLE INVENTORY

Rita Dunn, Kenneth Dunn, and Gary Price

Target Population: Grades 3-12.

Norm Groups: Not available.

Purpose: Help students understand how they learn.

Title of Subcomponents: Four areas are Environmental, Emotional, Sociological, and Physical but 36 subscales.

Types of Scores: Not given.

Scoring Information: Computer scored.

Validity: Studies reflect predictive validity.

Reliability: Informal assessment.

Copyright: 1978 **Date of Most Recent Manual:** Not given.

Publisher: Price Systems, Box 3271, Lawrence, KS 66044.

Comments: Self report format containing 104 items. Administration is approximately 30 minutes. An adult version is called Productivity Environmental Preference Survey. A version for primary age students was developed in 1981 by Janet Perrin.

Source of Information: Dunn, Rita. (1983).

LEARNING STYLE INVENTORY

Daniel Kolb

Target Population: Young adult.

Norm Groups: Not available.

Purpose: Individual awareness of personal learning style and available alternative modes.

Titles of Subcomponents: Feeling, Watching, Thinking, Doing.

Types of Scores: Not available.

Scoring Information: Hand scored.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: 1976 **Date of Most Recent Manual:** Not given.

Publisher: McBer and Company, 137 Newbury St., Boston, MA 02116

Comments: Administration 5-10 minutes. Self-ranking of four words in each of nine sets.

Source of Information: Knaak, W.; MMY: 607.

LEARNING STYLES INVENTORY

Joseph Renzulli and Linda Smith

Target Population: Grades 4-12.

Norm Groups: Not normed.

Purpose of Instrument: Identify styles of learning preferred by students.

Title of Subcomponents: Attitudes toward 9 modes of instruction.

Types of Scores: Number on each subscale.

Scoring Information: Computer or hand scoring.

Validity: Minimal data.

Reliability: .77 internal.

Copyright: 1978 **Date of Most Recent Manual:** Not given.

Publisher: Creative Learning Press, Mansfield Center, Connecticut.

Comments: Both teacher and student forms; Likert type scale. Administration: 30 minutes. Items should be read to younger students. Based on a concrete approach to match projects, drill and recitation, peer teaching, discussion, teaching games, independent study, programmed instruction, lecture and simulation to student preference.

Source of Information: Keyser, D. & Sweetland R., Vol. 2 (1984).

MYERS-BRIGG TYPE INDICATOR

Target Population: Grade 7 and above.

Norm Groups: Several thousand males and females from elementary school to adult.

Purpose of Instrument: To determine why person likes to use perception and judgement.

Title of Subcomponents: Extroversion/Introversion, Sensing/Intuiting, Thinking/Feeling, and Judgement/Perception.

Types of Scores: Standard.

Scoring Information: May be administered and scored through microcomputer software or hand scored.

Validity: Predictive validity is moderate.

Reliability: .55-.92 internal consistency.

Copyright: Varies from 1962-1985 **Date of Most Recent Manual:** 1985

Publisher: Consulting Psychologists Press and CTB/McGraw Hill.

Comments: Individual or group administered.

Source of Information: CTB/McGraw Hill catalog.

STUDENT LEARNING STYLES QUESTIONNAIRE

Anthony Graska and Sheryl Riechmann

Target Population: High School or College.
Norm Groups: Not available.
Purpose: Identify learning style.
Titles of Subcomponents: Independent, Avoidant, Collaborative, Dependent, Competitive and Participant
Types of Scores: Not available.
Scoring Information: Hand scored.
Validity: Informal assessment.
Reliability: Informal assessment.
Copyright: 1974. **Date of Most Recent Manual:** Not given.
Publisher: Institute for Research and Training in Higher Education, University of Cincinnati, Cincinnati, OH 45221
Comments: 90 items.
Source of Information: Knaak, W. (1983).

TEACHER ASSESSMENT OF STUDENT LEARNING STYLES

David Hunt

Target Population: Students.
Norm Groups: Not given.
Purpose: Observe student reactions to systematic teacher-introduced changes in structure.
Titles of Subcomponents: Not given.
Types of Scores: Not available.
Scoring Information: Not available.
Validity: Informal assessment.
Reliability: Informal assessment.
Copyright: Not given. **Date of Most Recent Manual:** Not given.
Publisher: Not available.
Comments: Administration time 20 minutes.
Source of Information: Knaak, W. (1983).

Study Skills

How the student studies may very well be related to learning styles and to the learning of strategies for processing information. Few study skills inventories appear to exist today but this is an area of teacher interest. If the student can identify his learning style and can learn processing stategies that are compatible, studying should become less of an issue.

The instruments reviewed represent all that the staff were able to locate.

STUDY ATTITUDES AND METHODS SURVEY (SAMS)

William B. Michael, Joan S. Michael, & Wayne S. Zimmerman

Target Population: Junior High, Senior High and Community College students.

Norm Groups: Not available.

Purpose: Measure attitudes, motivation, and study habits.

Titles of Subcomponents: Academic Interest—Love of Learning, Academic Drive—Conformity, Study Methods, Study Anxiety, Manipulation, Alienation Toward Authority.

Types of Scores: Not available.

Scoring Information: Hand or Machine Scoring.

Validity: Not available.

Reliability: Not available.

Copyright: Not given. **Date of Most Recent Manual:** Not given.

Publisher: Educational and Industrial Testing Service, P.O. Box 7234, San Diego, CA 92107.

Comments: Administration 30-35 minutes.

Source of Information: EDITS Catalog.

SURVEY OF STUDY HABITS AND ATTITUDES

William Brown and Wayne Haltzman

Target Population: Secondary and college students.

Norm Groups: Grades 7-9, 10-12, and college freshmen.

Purpose of Instrument: Assist students understand how they study (habits) and attitudes toward studying.

Title of Subcomponents: Delay Avoidance, Work Methods, Study Habits Subtotal, Teacher Approval, Education Acceptance, Study Attitudes Subtotal, Total Study Orientation score.

Types of Scores: Percentile.

Scoring Information: Hand score or local machine score.

Validity: .43 with grades earned.

Reliability: .87-.93 test-retest.

Copyright: 1953, 1967 **Date of Most Recent Manual:** Not available.

Publisher: Psychological Corporation.

Comments: Time: 20-35 minutes.

Source of Information: Catalog and 7MMY.

Work Assessment

Work assessment, as exemplified by the instruments available, refers primarily to industrially and service based occupational fields and to work in general. Work samples tend to be developed from the industrial and technical fields although some developers have developed a broader range of work samples. Work samples are particularly useful for students who have low levels of verbal skills and who prefer to demonstrate their skills with their hands and their tools.

Ratings scales for recording work and work-related behavior are similar in structure to adaptive behavior scales but apply to the work setting.

The instruments reviewed hold potential for use with students. They do, however, have their limitations. Work samples, both commercially and locally developed, frequently have little validity data. Most developers subscribe to the philosophy that since the tasks are taken directly from a job, that no reason exists to doubt or study the validity of the sample. Most researchers, however, are skeptical of relying upon face validity as the only criterion of validity. When used in conjunction with other data, they provide good information. In determining instruments for a vocational assessment lab, one should carefully review all of the data available before deciding upon a combination of instruments for a center and for the individuals who are assessed.

BRODHEAD GARRETT VOCATIONAL SKILLS ASSESSMENT AND DEVELOPMENT PROGRAM

Target Population: Special Needs Students.
Norm Groups: Data not available.
Purpose: Assess student ability in sorting, assembly-salvage tasks.
Titles of Subcomponents: 18 work samples: Sorting, Assembly, Salvage.
Types of Scores: 3 point scale based on both time and quality; 5 point scale for rating observations.
Scoring Information: Hand score.
Validity: Informal assessment.
Reliability: Informal assessment.
Copyright: Not Given. **Date of Most Recent Manual:** Not Given.
Publisher: Brodhead Garrett
Comments: Lack of data suggest cautious use.
Source of Information: Botterbusch (1980).

CHOICE WORK SAMPLES

Target Population: Special needs students.
Norm Groups: Not available.
Purpose of Instrument: Hands-on career education.
Title of Subcomponents: 50 self-instructional carrels (job samples).
Types of Scores: Ratings.
Scoring Information: Hand scoring.
Validity: Informal assessment.
Reliability: Informal assessment.
Copyright: 1975, and later as new modules were added
Date of Most Recent Manual: Not given.
Distributor: Educational Systems, 6700 Granada Lane, Prairie Village, KS 66208; (913) 722-4713.
Comments: Individual administration. CHOICE is a result of more than three years of research and development by Utah State University and the Utah State Board of Education. Marketing outside of Utah began in 1978. Students must answer 20 questions about each work sample used.
Source of Information: CHOICE brochures.

COMPREHENSIVE OCCUPATIONAL ASSESSMENT AND TRAINING SYSTEM (COATS)

Target Population: High school and adults in manpower and training programs.

Norm Groups: Disadvantaged and handicapped based on work performance and time.

Purpose of Instrument: Vocational assessment of ability, interests, and attitudes, job matching, and instruction.

Title of Subcomponents: 26 work samples such as Nutrition, Real Estate, Masonry, Drafting, Small Engines, Communication Services.

Types of Scores: 1-5 ratings of work behavior and codes to match levels provided in D.O.T.

Scoring Information: Hand scoring for ratings of proficiency plus machine scoring at PREP, Inc.

Validity: Established somewhat through research studies.

Reliability: Not available, but given in manual.

Copyright: 1975, 1981 **Date of Most Recent Manual:** Not given.

Publisher: PREP, Inc.

Comments: Individual or group administration requiring 52 hours if all 26 work samples are administered. In addition to work samples, this system includes job matching (personal characteristics to job requirements), employability attitudes, and living skills. Each component can be used separately.

Source of Information: Botterbusch, C. (1980). *Comparison of Fourteen Commercial Vocational Evaluation Systems*. Menomonie: Materials Development Center, University of Wisconsin-Stout.

FLORIDA INTERNATIONAL DIAGNOSTIC-PRESCRIPTIVE VOCATIONAL COMPETENCY PROFILE

Howard Rosenberg and Dennis Tesolowski

Target Population: Special needs Students and Adults.

Norm Groups: 100 trainees (10 each in 10 groups) in secondary and post-secondary rehabilitation programs.

Purpose: Evaluate critical vocational behaviors germane to work adjustment, job readiness and employability.

Title of Subcomponents: Vocational Self-Help Skills, Social-Emotional Adjustment, Work Attitudes-Responsibility, Cognitive-Learning Ability, Perceptual-Motor Skills, General Work Habits.

Types of Scores: 5-point scale, percentiles.

Scoring Information: Hand scored.

Validity: Marginal but better than for most behavior rating scales.

Reliability: Meager data that are reported indicate high reliability.

Copyright: 1979-1980 **Date of Most Recent Manual:** 1980.

Publisher: Stoelting.

Comments: Special education teachers and work supervisors may find this profile helpful.

Source of Information: Stoelting catalog, personal correspondence, and MMY 9:420.

JEWISH EMPLOYMENT VOCATIONAL SERVICE WORK SAMPLE SYSTEM (JEVS)

Target Population: Economically/academically disadvantaged.

Norm Groups: 1,172 from a disabled population, 72% urban, from southern Colorado.

Purpose of Instrument: To assess potential for job placement.

Title of Subcomponents: 28 work samples associated with 12 worker trait group arrangements in the D.O.T., fourth edition, such as Nut, Bolt, and Washer Assembly; File Sorting; Grommet Assembly; Metal Square Fabrication; Proofreading; Adding Machine; and Blouse Making.

Types of Scores: Range of 1-3 (3 = top 40%, 2 = middle 20%, and 1 = bottom 40).

Scoring Information: Hand scoring.

Validity: No information available.

Reliability: No information available.

Copyright: 1973 **Date of Most Recent Manual:** Not given.

Publisher: Jewish Employment and Vocational Service

Comments: Administration: 36 hours for complete system. Cost of materials includes training in Philadelphia or other site chosen by JEVS. VIEWS and VITAS are both more current JEVS systems.

Source of Information: Flanagan, M. in Kapes, J. & Mastie, M. (1982).

JOB TAP: JOB TRAINING ASSESSMENT PROGRAM

Target Population: Youth and adults seeking employment.

Norm Groups: 1,310 persons from 37 different locations in 12 states. Norms are broken down by age, education, sex, ethnic background and work experience.

Purpose of Instrument: Identify job related knowledge, vocational aptitude, interests, skills, and work experience and to integrate these for promising opportunities.

Title of Subcomponents: Management Guide, Job Finder Workbook, Job Finder Checklists, Administration Manuals for Tests (Basic Work Skill Test, Inspection/Visualization Test, Training and Work Manuals, Work Rules and Procedures, and Arithmetic).

Types of Scores: Ratings and percentiles.

Scoring Information: Not given.

Validity: .39-.79 correlated with training skill categories.

Reliability: Not given.

Copyright: 1985 **Date of Most Recent Manual:** 1985

Publisher: Educational Testing Service.

Comments: Administration: 140 minutes. Provides profile of interest and work experience, career skills, counselor's report and administrator's report. This is a *system* that includes tests.

Source of Information: JOB TAP materials from publisher.

MCCARRON DIAL

Target Population: Vocational special needs (MR, LD, BD).

Norm Groups: Varies depending upon test (WISC-R, Bender, Emotional Inventory, and Behavior Scales).

Purpose of Instrument: Assess visual motor skills, make vocational decisions and review behaviors.

Title of Subcomponents: 17 in five factors: Verbal-Cognitive, Sensory, Fine and Gross Motor, Emotional Adjustment, Integrative coping.

Types of Scores: Various - I.Q., errors, observation ratings.

Scoring Information: Hand scoring; some components require specialized training.

Validity: Data available on individual components.

Reliability: Data available on individual components.

Copyright: 1975 **Date of Most Recent Manual:** Not given.

Publisher: McCarron Dial Systems, P. O. Box 45628, Dallas, TX 75240.

Comments: Group administered - up to two weeks to complete but an abbreviated version can be given in approximately two hours. Training required prior to purchase. System is based on neurological theory of behavior. Manuals are very detailed.

Source of Information: McCarron Dial materials & Botterbusch, C. (1980).

MECA/Microcomputer Evaluation of Career Areas

Target Population: Vocational Special Needs Students.

Norm Groups: Not available.

Purpose: Measure interests, aptitudes, and abilities for the real world of work but utilizing an educational model rather than the rehabilitation/medical model.

Title of Subcomponents: Automotive, Building Maintenance, Graphic Design, Computers, Cosmetology, Custodial Housekeeping, Electronics, Small Engines, Food Service, Business and Office, Manufacturing, Distribution, Health Care, Construction, Horticulture.

Types of Scores: Not given.

Scoring Information: Not available.

Validity: Informal assessment.

Reliability: Informal assessment.

Copyright: Not given. **Date of Most Recent Manual:** Not given.

Publisher: The Conover Company, Ltd., P.O. Box 155, Omro, WI 54963.

Comments: Administered to one person at a time via microcomputer. Each work sample takes about 20 minutes and is good for students in grades 6-10. Evaluator is freed from administration for behavioral observations and other responsibilities. These materials were originally prepared by Repetto and Baker in the St. Louis Special School District as career education units and later were adapted by the Conover Company for assessment. Costs of these individual work samples are modest in comparison with some commercial systems.

Source of Information: Conover materials.

MESA (MICROCOMPUTER EVALUATION AND SCREENING ASSESSMENT)

Target Population: Special needs students and adults.

Norm Groups: National employer norms (Industrial Standards).

Purpose of Instrument: Assess physical and functional skills.

Title of Subcomponents: Gross Skills, Fine Skills, Motor-Sensory Integration, Microcomputer Screening.

Types of Scores: D.O.T. profile.

Scoring Information: Hand scoring for parts I-III and data are also entered into the computer and combined with part IV which is computer scored.

Validity: Not available.

Reliability: Not available.

Copyright: 1982 **Date of Most Recent Manual:** Not given.

Publisher: Valpar International, 3801 E. 34th Street, Tucson, AZ 85713.

Comments: Administration: 3.5 hours. Parts I-III allow evaluator to screen 5-10 students at one time; part IV is individually administered. MESA is more of a screening than diagnostic tool.

Source of Information: Valpar materials.

MICRO-TOWER

Target Population: Special needs/general rehabilitation population.

Norm Groups: 19 different norm groups.

Purpose of Instrument: Assess aptitude.

Title of Subcomponents: Electronics Connector Assembly Bottle Capping and Packing, Lamp Assembly, Blueprint Reading, Graphic Illustration, Filing, Mail Sorting, Zip Coding, Recording, Checking, Making Change, Payroll Computation, Want Ad Comprehension, and Message Taking.

Types of Scores: 5 point rating scale, emphasis on quality plus behavior observation.

Scoring Information: Hand scoring.

Validity: Construct and concurrent validity reported.

Reliability: High reliabilities reported in manuals.

Copyright: 1977 **Date of Most Recent Manual:** Not given.

Publisher: ICD Rehabilitation and Research Center.

Comments: Administration: group in 3-5 days. System is based on the D.O.T.
One excellent feature is the separation of learning and performance.

Source of Information: Botterbusch, C. (1980).

PENNSYLVANIA BI-MANUAL WORK SAMPLE

John R. Roberts

Target Population: Ages 16 and up.

Norm Groups: Males and females age 15-17, 16-39, an industrial group, and blind and partially sighted persons.

Purpose of Instrument: Assesses speed and dexterity in skills integrating the use of arms, hands, and fingers, and also assesses eye-hand coordination.

Titles of Subcomponents: Assembly and Disassembly.

Types of Scores: Percentile ranks and standard scores.

Scoring Information: The number of minutes and seconds to assemble and disassemble the nuts and bolts are recorded. These are added together to produce a single, final "transmuted" score.

Validity: .40 with other dexterity tests; no studies with predictive validity.

Reliability: Split-half .89.

Copyright: 1943, 1945, 1969. **Date of Most Recent Manual:** Not given.

Publisher: American Guidance Service.

Comments: Group-administered in 10 to 15 minutes. Each student must have a board. Has norms for the blind.

Source of Information: Botterbusch, K., & Michael, N. (1985) and 3MMY.

PREVOCATIONAL ASSESSMENT SCREEN (PAS)

Target Population: Mildly handicapped and disadvantaged youth.

Norm Groups: Mildly handicapped disadvantaged, average prevocational students and Industrial Standards (MTM-1).

Purpose of Instrument: Screening students for training.

Title of Subcomponents: Alphabetizing, Etch-A-Sketch, Payroll, Small Parts, Pipe Assembly, O-Rings, Block Design, Color Sort.

Types of Scores: Percentiles based on time and errors are converted to a 5 point rating.

Scoring Information: Hand or computer scored.

Validity: Data not found in technical manual.

Reliability: .81-.95 test-retest over a 3-5 day period.

Copyright: 1982, 1985 **Date of Most Recent Manual:** 1985

Publisher: Piney Mountain Press, Inc., P. O. Box 333, Cleveland, GA 30528.

Comments: Administration: individual or maximum of 5 in small group. Norms are based on small sample sizes but are clearly identified in the technical manual. Comment is made that a "marked relationship exists between evaluee's performance on the samples and their prevocational skills" but data are not provided to support the statement.

Source of Information: Technical manual and correspondence.

SAGE

Target Population: Special needs students and adults.

Norm Groups: Not available.

Purpose of Instrument: Measure vocational interests, cognitive/conceptual abilities, vocational aptitudes and general work attitudes.

Title of Subcomponents: Measures all 11 aptitudes of D.O.T., 12 interest areas of Guide for Occupational Exploration, 20 work attitudes, and Cognitive/Conceptual Abilities of Reasoning, Language, and Mathematics.

Types of Scores: Percentiles, D.O.T. ability ratings, and other D.O.T. and G.O.E. rating scores.

Scoring Information: Hand scoring.

Validity: Not available.

Reliability: Not available.

Copyright: Late 70's or early 80's **Date of Most Recent Manual:** Not given.

Publisher: PESCO.

Comments: Administration time is about 3 hours and is highly test oriented as opposed to work samples. System cost is approximately $6,500-$7,000.

Source of Information: SAGE materials.

SINGER VOCATIONAL EVALUATION SYSTEM

Singer Career Systems

Target Population: Disadvantaged who were academic low achievers.

Norm Groups: An average of 192 persons per sample. Sample is described by age, sex, race, highest grade completed, IQ score, reading and math achievement scores, and major disabilities. Methods-time-measurement (industrial) standards are also compiled on each work sample. Employed worker norms are available on some samples.

Purpose of Instrument: To provide hands-on evaluations for disadvantaged and handicapped based on a job analysis and simulation approach.

Title of Subcomponents: 25 or more work samples in such areas as Masonry, Cooking and Baking, Small Engine Service, Medical Service, Cosmetology, Drafting, Soil Testing, Electronics Assembly, and Office Services.

Types of Scores: Range of 5-1 (5=1½ s.d.below the mean, 3=± ½ s.d. of the mean, and 1= + ½ s.d. and above.

Scoring Information: Hand scoring in minimal time.

Validity: .12 to .63 in one study; .42 to .80, and .54 to 1.00 in another.

Reliability: .61 to .71 test-retest in one study.

Copyright: Varies depending **Date of Most Recent Manual:** 1979 or later on sample

Publisher: Singer Career Systems.

Comments: Singer materials appeal to participants because they closely resemble occupations of similar titles. They provide career information as well as simulated experience. Cost of replacement materials needs to be built into one's budget.

Source of Information: Singer Corporation materials.

SKILLS ASSESSMENT MODULE (SAM)

Target Population: Mildly handicapped and disadvantaged youth.

Norm Groups: Vocational, handicapped, and disadvantaged students; Industrial Standards (MTM-1).

Purpose of Instrument: Assessment for placement in training programs.

Title of Subcomponents: Revised Beta, PTI Oral Directions Test, Learning Styles Inventory, Mail Sort, Alphabetizing, Etch-A-Sketch, Payroll, Patient Memo, Small Parts A, B1, B2, Ruler Reading, Pipe Assembly, O-Rings, Block Design, Color Sort, Circuit Boards.

Types of Scores: Percentiles based on time and errors are converted to a 5 point rating.

Scoring Information: Hand or computer scored.

Validity: Data not given.

Reliability: .80-.95 test-retest over a 3-5 day period.

Copyright: 1982, 1985 **Date of Most Recent Manual:** 1985

Publisher: Piney Mountain Press, Inc., P. O. Box 333, Cleveland, GA 30528.

Comments: Individual administered or in groups with a maximum of 5 in 2-3 hours. Norm sample sizes are small but clearly identified in the technical manual. Validity is discussed in the manual but not supported with data.

Source of Information: Technical manual and correspondence.

TALENT ASSESSMENT PROGRAM

Wilton Nighswonger

Target Population: Handicapped Students; Industrial Job Applicants.

Norm Groups: 7 different norm groups, 6,000 participants.

Purpose: Assess aptitude in industrially-oriented jobs.

Title of Subcomponents: Visualization and Retention; Sorting by Color, Shape and Size, Touch; Handling Small and Large Materials; Using Small and Large Tools.

Types of Scores: Percentiles based on time and quality.

Scoring Information: Hand scoring. Computerized program, IRIS System, is available.

Validity: Not available.

Reliability: .85 coefficient of stability.

Copyright: Not given. **Date of Most Recent Manual:** Not given.

Publisher: Talent Assessment, Inc., P.O. Box 5087, Jacksonville, FL 32207

Comments: Individually administered in 2.5 hours. System is based on occupational clusters. New manual is tremendously improved over original manual. Learning and performance are separated. Administrator training is required for 1.5 days.

Source of Information: Botterbusch, K., (1980) and Training notes.

TOWER (TESTING, ORIENTATION, AND WORK EVALUATION IN REHABILITATION)

Target Population: Handicapped.

Norm Groups: Clients at ICD Rehabilitation and Research Center.

Purpose of Instrument: Assess clients/students vocational aptitudes.

Title of Subcomponents: Clerical, Drafting, Drawing, Electronics Assembly, Jewelry, Leather Making, Lettering, Machine Shop, Mail Clerk, Optical Mechanics, Pantograph Engraving, Sewing, Workshop Assembling, Welding.

Types of Scores: Ratings on a 5 point scale for time and quality.

Scoring Information: Evaluator times student.

Validity: Data insufficient to judge validity.

Reliability: Not available.

Copyright: 1974 **Date of Most Recent Manual:** Not Given

Publisher: ICD Rehabilitation and Research Center.

Comments: Usually individually administered but several people will be working on different work samples concurrently. Two week training is required before purchasing manuals and related materials. Work samples are constructed locally. Three weeks required to complete the 93 work samples.

Source of Information: Botterbusch, C. (1980).

VALPAR COMPONENT WORK SAMPLE SYSTEM

Target Population: General population, industrially injured workers.

Norm Groups: 9 different norm groups and industrial standards.

Purpose of Instrument: Assess vocational and functional skills.

Title of Subcomponents: Small Tools, Size Discrimination, Numerical Sorting, Upper Extremity Range of Motion, Clerical Comprehension and Aptitude, Independent Problem Solving, Multi Level Sorting, Simulated Assembly, Whole Body Range of Motion, Tri-Level Measurement, Eye-Hand-Foot Coordination, Soldering and Inspection.

Types of Scores: 5 point rating scale for behavior; percentiles.

Scoring Information: Evaluator times student; student scored for time, errors, and total score. Scoring takes 5-15 minutes per work sample.

Validity: Not available.

Reliability: Not available.

Copyright: Varies from 1974 **Date of Most Recent Manual:** Separate manual for each work sample.

Publisher: Valpar International, 3801 E. 34th Street, Tucson, AZ 85713.

Comments: Administration: each student works independently but several students may be working on different work samples concurrently. Administration time varies with each work sample. No reading is required on work samples except where the job would require it.

Source of Information: Peterson in Kapes, J., & Mastie, M. (1982).

VALPAR 17, PREVOCATIONAL READINESS BATTERY

Target Population: Mentally retarded.

Norm Groups: Research norms for 10 groups.

Purpose of Instrument: Assess vocational and functional skills.

Title of Subcomponents: Developmental Assessment, Workshop Evaluation, Vocational Interest Screening, Interpersonal-Social Skills, Independent Living Skills.

Types of Scores: Behaviors based on 3 point scale.

Scoring Information: Hand scored based on total points.

Validity: Not available.

Reliability: Not available.

Copyright: 1979 **Date of Most Recent Manual:** Not given.

Publisher: Valpar International, 3801 E. 34th Street, Tucson, AZ 85713.

Comments: Administration: 5.5 hours. May be useful with LD students. Manual is detailed.

Source of Information: Peterson in Kapes, J. & Mastie, M. (1982); Valpar brochure.

VASCO

Robert McClung

Target Population: Handicapped and Disadvantaged Students.

Norm Groups: Not available.

Purpose: Assess Interests, Abilities, Work Behaviors and Readiness for Training and World of Work.

Titles of Subcomponents: Learning Styles, Interests, Physical Capacities, Job Seeking/Keeping, Work Behavior and Social Skills.

Types of Scores: Not given.

Scoring Information: Not available.

Validity: Not available.

Reliability: Not available.

Copyright: 1983. **Date of Most Recent Manual:** 1983.

Publisher: Vocational Assessment Consultants, Inc., P.O. Box 64401, Virginia Beach, VA 23464.

Comments: Administration time: 2.5 hours. May be transported; May meet Vocational Assessment Level II needs.

Source of Information: Brochure.

VOCATIONAL INFORMATION AND EVALUATION SAMPLES (VIEWS)

Target Population: Mentally handicapped individuals age 14 and above.

Norm Groups: 452 mentally retarded, age 15-63, with a mean IQ of 53.

Purpose of Instrument: Assess vocational potential and work related behaviors to plan training programs.

Title of Subcomponents: 16 work samples such as File Sorting; Valve Assembly; Circuit Board Assembly; Mail Sorting; Paper Count; Paper Cutting and Stapling; and Machine Feeding.

Types of Scores: Range 1-3 (3 = top 40%, 2 = middle 20%, and 3 = bottom 40).

Scoring Information: Hand scoring; one minute per work sample.

Validity: Some correlation with Revised Beta.

Reliability: Not available.

Copyright: 1973. **Date of Most Recent Manual:** 1977

Publisher: Jewish Employment and Vocational Service.

Comments: Time: 30 hours to complete entire system. Students are given a learning period for each work sample and assessment does not begin until mastery is achieved. Training for administrator is required and is part of purchase price.

Source of Information: Flanagan, M. in Kapes, J. & Mastie, M. (1982).

VOCATIONAL INTEREST, TEMPERAMENT AND APTITUDE SYSTEM (VITAS)

Jewish Employment and Vocational Service

Target Population: Economically/academically disadvantaged with less than 12th grade education and special needs high school students.

Norm Groups: 450 CETA participants and 250 vocational special needs high school students. Data were collected from six centers.

Purpose of Instrument: To assess work potential in terms of interest, temperament, and aptitudes through a hands-on approach.

Title of Subcomponents: 21 work samples such as Tile Sorting and Weighing, Verifying Numbers, Pressing Linens, Bank Teller, Spot Welding and Drafting.

Types of Scores: Rating of 1 to 3; 3 = top 40%, 2 = middle 20%, and 1 = bottom 40%.

Scoring Information: Hand scoring by clerk, counselor, or aide; one minute per work sample.

Validity: See description of validity in work sample section of Overview to this chapter.

Reliability: No data found.

Copyright: 1979. **Date of Most Recent Manual:** 1979

Publisher: Jewish Employment and Vocational Service.

Comments: Cost includes one week training for administering; takes an average of 15 hours to administer all 21 work samples; JEVS sells the 21 as a unit and recommends the administration of all to each student/client.

Source of Information: Flanagan, M. in Kapes, J. & Mastie, M. (1982).

WORK ADJUSTMENT RATING FORM (WARF)

James A. Bitter and D. J. Bolanovich

Target Population: Retarded youth and adults, ages 16-21 years of age.

Norm Groups: 40 mentally retarded male and female clients, ages from 15.92 to 19.83 with WAIS means scores from 39 to 84.

Purpose of Instrument: To predict successful work placement from job-readiness characteristics.

Title of Subcomponents: Amount of Supervision Required, Realism of Job Goals, Teamwork, Acceptance of Rules/Authority, Work Tolerance, Perseverance in Work, Seeks Assistance, and Importance of Job Training.

Types of Scores: Subtest and overall score. Scaled scores based on five questions in each of the eight components arranged in Guttman order (most intense or highest quantity of a dimension implies performance of lesser intensity/quantity on same dimension).

Scoring Information: Hand scored in less than 10 minutes.

Validity: Not available.

Reliability: .67 to .98 interrater agreement.

Copyright: Approximately 1965. **Date of Most Recent Manual:** Not given.

Publisher: Not formally published; usually obtained from rehabilitation texts or journals.

Comments: The WARF was developed from an extensive review of literature on predicting job success from job readiness measures. Best use is as another tool to determine if students/clients are ready for employment.

Source of Information: Bitter, J. & Bolanovich, D. (1970).

WIDE RANGE EMPLOYMENT SAMPLE TEST (WREST)

Target Population: Special needs.

Norm Groups: Workshop norms, 4,000 Delaware residents in general, and special norms can be derived by Jastak with special arrangements.

Purpose of Instrument: Assess vocational capacity in manual and clerical job tasks.

Title of Subcomponents: Folding, Stapling, Packaging, Measuring, Assembling, Tag Stringing, Gluing, Collating, Color or Shade and Pattern Matching.

Types of Scores: Scaled scores for subtests and standard score for total, percentiles.

Scoring Information: Hand scoring for time and errors requires about ten minutes.

Validity: .86 and .92 with supervisor ratings.

Reliability: .80-.90 test-retest.

Copyright: 1980 **Date of Most Recent Manual:** Not given.

Publisher: Jastak.

Comments: Administration: 1.5-2 hours to individuals or groups up to six persons. The WREST is composed of ten subcomponents each requiring 7-15 minutes to complete. Well organized manual.

Source of Information: Botterbusch, C. (1980); Ward in Kapes, J., & Mastie, M. (1982).

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APPENDIX

Addresses of Publishers

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